

RCRA RECORDS CENTER  
FACILITY Patt & Whitney <sup>Main</sup> S+  
I.D. NO. CTD 990672081  
FILE LOC. R-5  
OTHER ROMS # 2587

**DRAWINGS**

**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**                      ☐ **Other (Provide  
Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 1: SOIL INVESTIGATIONS EXPLOSIVE  
STORAGE AREA UST LOCATION & CONSTITUENTS  
DETECTED MAP**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

\_\_\_\_\_  
\_\_\_\_\_

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***

**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**      ☐ **Other (Provide  
Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 2: GROUNDWATER INVESTIGATIONS**  
**EXPLOSIVE STORAGE AREA UST LOCATION &**  
**CONSTITUENTS DETECTED MAP**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

\_\_\_\_\_  
\_\_\_\_\_

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***

# DRAFT

## UNIT-SPECIFIC TECHNICAL MEMORANDUM: X-430 Aboveground Storage Tank PRATT & WHITNEY, EAST HARTFORD, CT

---

**AREA:** North Klondike

**SUB-AREA:** X-430

**ENVIRONMENTAL UNIT:** X-430 Aboveground Storage Tank

**Location:** In the North Klondike Area, this unit is located on the fifth road north on the North Access Road from Perimeter Road. The former aboveground storage tank (AST) was located just south of the X-430 Test Stand (Drawing 1).

**Description:** The former fuel oil AST, approximately 2,000-gallons in size, was located to the south of the X-430 Test Stand adjacent to the road from the North Access Road. Presumably, the AST provided fuel oil for the former building of the X-430 Test Stand. The size, location and use of the AST was identified based on a facility fire protection map (Pratt & Whitney Plant Engineering, 1976). Presently, the foundation of the former test stand building remains, while no evidence of the tank exists.

**Dates of Operation:** Approximately 1957 to 1993. The X-430 Test Stand was built in 1957 and remained in place until it was demolished in the early 1990's. The operation of the AST was presumed to parallel that of the X-430 Test Stand.

**Processes:** Supplied fuel oil to the X-430 Test Stand building.

**Aerial Photographs:** Large-scale aerial photographs for 1965, 1970, and 1975 were obtained from Keystone Aerial Surveys Inc. Two smaller aerial photographs were obtained from the Pratt and Whitney (P&W) Photographic Services Department. All of the large-scale aerial photographs and smaller aerial photographs reveal that the X-430 Test Stand was an existing structure in the North Klondike as early as 1965. However, no evidence that would indicate an AST was observable in any of the photographs. It is assumed that the dates of operation of the AST would have paralleled the existence of the building.

**Specific Contaminants of Concern:** No. 2 fuel oil is the primary constituent of concern. In order to be as comprehensive as possible in the investigation that was conducted, the following constituent groups were analyzed for: volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), and semivolatile organic compounds (SVOCs).

**Potential Release Mechanism:** Impacts to soils and groundwater from potential spills or leaks associated with tank filling and tank leakage from the bulk fuel oil storage tank.

### INVESTIGATION AND REMEDIATION ACTIVITIES:

Due to the potential for a release associated with the former 2,000 gallon fuel oil AST, a subsurface investigation to determine the degree and extent of potential soil contamination in the vicinity of the tank was performed in March and June 1997. Prior to 1997, no investigation of



the area in the vicinity of the tank had reportedly been performed. The investigation is presented below in chronological order.

## **March 1997 Investigation (Loureiro Engineering Associates, P.C.):**

**Description:** On March 10 and 11, 1997, four borings, NK-SB-264 through NK-SB-267, were advanced in the general vicinity of the former AST by Loureiro Engineering Associates, P.C. (LEA). The sampling locations are shown on Drawing 1. The boring locations were selected to provide coverage of the approximate footprint of the former AST. Soil samples were collected from the borings in continuous 2-foot intervals to a depth of 12 feet. For boring NK-SB-264, soil samples were collected in continuous 2-foot intervals to 16 feet. For boring NK-SB-267, soil samples were only collected to a depth of 8 feet as a result of no sample recovery from the soil sampler for the 8 to 12 foot interval. The depths were selected to ensure that the varved clay layer was encountered and that sufficient data was collected for comparisons to the Connecticut Remediation Standard Regulation (RSR).

A total of twenty-four soil samples were submitted to the LEA Analytical Laboratory and screened for the presence of target VOCs, including benzene (BZ), ethylbenzene (EBZ), tetrachloroethylene (PCE), toluene (TL), 1,1,1-trichloroethane (TCA), trichloroethylene (TCE), and xylenes (XYL). Considering visual, olfactory, or instrument evidence, and with consideration of the potential release mechanism, two samples, from the 0 to 2 foot interval and 4 to 6 foot interval, from each of the borings were submitted for fixed laboratory analysis.

The majority of the soil samples were submitted to Environmental Science Service Laboratory (ESS) for analysis with a limited number of the soil samples also submitted to AEL for analysis. Due to data validation issues, analytical results from ESS were deemed unusable for the Airport/Klondike Project. Subsequent to these concerns, ESS analytical results have not been considered within this Unit-Specific Technical Memorandum. Two soil samples were also submitted to Averill Environmental Laboratory, Inc. (AEL) and analyzed for the presence of VOCs, SVOCs, and TPH. A summary of the samples collected and analyses performed is included in Table 1.

In addition to the soil samples, groundwater samples were collected from the four aforementioned borings using Geoprobe<sup>®</sup> screenpoint groundwater sampling techniques. Unfortunately, these samples were also submitted to ESS and as a result of the data validation issues the analytical results have not been considered.

**Investigation Results:** Based on the boring logs, groundwater was encountered in the 4 to 6 foot interval in all of the borings. Varved clay was encountered in boring NK-SB-264 at a depth of 13 feet. For borings NK-SB-265 and NK-SB-266, varved clay was noted on the boring logs as being encountered at 12.2 and 12.5 feet, respectively. Varved clay was not encountered in boring NK-SB-267 as no soil was recovered from the 8 to 12 foot interval. Overall, no visual or olfactory evidence of contamination was noted on the boring logs. However, a dark brown stain was noted for the 6 to 8 foot interval in boring NK-SB-266, without any corresponding olfactory evidence of contamination.

Concentrations of constituents detected in soil samples collected for this unit are presented in Table 2. A complete summary of soil analytical results with detection limits is presented in Table 3. Detected concentrations at each sampling location are shown on Drawing 1. PCE, TL, and XYL were detected in the soil samples submitted to the LEA Analytical Laboratory from boring NK-SB-267. The maximum concentrations of PCE, TL, and XYL detected were 20J micrograms per kilogram ( $\mu\text{g/kg}$ ), 17E  $\mu\text{g/kg}$ , and 10J  $\mu\text{g/kg}$ , respectively. These three VOCs were detected at low concentrations, having either a "J" or "E" qualifiers associated with the concentrations. The "J" qualifier indicates that the value was estimated because the concentration was detected below the method detection limit (MDL), while the "E" qualifier indicates that the value was estimated because the concentration was outside of the calibration range. VOCs, SVOCs, and TPH were not detected in the soil samples analyzed by AEL.

**Data Evaluation and Conclusions:** The soil boring data were compared to the default numeric criteria included in the RSR. Criteria are established in the RSR based on exposure pathways for various environmental media, including soil and groundwater. The evaluation of the soils data is based on a comparison to the residential direct exposure criteria (RDEC), the industrial/commercial direct exposure criteria (IDEC), and the GB pollutant mobility criteria (PMC) included in the RSR. For the VOCs detected in soil, no exceedances of the RDEC, IDEC, or the GBPMC were noted. Considering the data that was evaluated, little evidence exists that a release occurred in the vicinity of this unit. However, due to the validation issues with the analytical results from ESS, additional sampling is necessary to adequately characterize the area.

#### **June 1997 Investigation (LEA):**

**Description:** On June 6, 1997, two soil borings, NK-SB-315 and NK-SB-316, were advanced in the general vicinity of the former AST to complete the soil sampling of the approximate footprint of the former AST. In addition, borings NK-SB-317 and NK-SB-318 were advanced strictly for the collection of groundwater samples in the vicinity of borings NK-SB-266 and NK-SB-267, respectively. The sampling locations are shown on Drawing 1. Soil samples were collected from NK-SB-315 and NK-SB-316 in continuous 2-foot intervals to a depth of 12 feet.

A total of thirteen soil samples was submitted to the LEA Analytical Laboratory and screened for the presence of target VOCs. Based on visual, olfactory, or instrument evidence, and with consideration of the potential release mechanism, two soil samples from each boring were submitted to Quanterra, Inc. (QNT) for analysis. The samples were analyzed for the presence of VOCs, SVOCs, and TPH. A summary of the samples collected and analyses performed is included in Table 1.

In addition, groundwater samples were collected from borings NK-SB-315 and NK-SB-316 using Geoprobe® screenpoint groundwater sampling techniques. Similarly, groundwater samples were collected from borings NK-SB-317 and NK-SB-318. The groundwater samples were collected from a depth of 5 to 8 feet below the ground surface. The groundwater samples were submitted to QNT for analysis of VOCs, SVOCs, and TPH. A summary of the samples collected and analyses performed is included in Table 1.

**Investigation Results:** Based on the boring logs groundwater was encountered in the 4 to 6 foot interval in borings NK-SB-315 and NK-SB-316. Varved clay was encountered in NK-SB-316 at a depth of 10.5 feet. However, varved clay was not encountered in NK-SB-315. Overall, no visual or olfactory evidence of contamination was noted on the boring logs. However, a dark brown stain was noted for the 6 to 8 foot interval in boring NK-SB-316, without any corresponding olfactory evidence of contamination. This stain was previously observed in boring in NK-SB-266.

Concentrations of constituents detected in soil samples collected for this unit are presented in Table 2. A complete summary of soil analytical results with detection limits is presented in Table 3. Detected concentrations at each sampling location are shown on Drawing 1. VOCs were not detected in the soil samples submitted to the LEA Analytical Laboratory. Acetone (ACT) and methylene chloride (MC) were the only VOCs detected in the soil samples submitted to QNT.. The highest concentrations of ACT and MC were 10J and 3.4 J micrograms per kilogram ( $\mu\text{g/kg}$ ) in boring NK-SB-315 for the 8 to 10 foot interval and in boring NK-SB-315 for the 0 to 2 foot interval, respectively. This "J" qualifier indicates that the concentration detected was between the method detection limit and the reporting limit.

TPH was not detected in the soil samples analyzed by QNT. Several SVOCs, including benzo[a]anthracene (BA), benzo[a]pyrene (BAP), benzo[b]fluoranthene (BBF), benzo[ghi]perylene (BGP), benzo[k]fluoranthene (BKF), benzoic acid (BZNICA), chrysene (CRYS), fluoranthene (FA), inden(1,2,3-cd)pyrene (IP), and pyrene (PYR), were detected only in the soil sample from boring NK-SB-316 at the 0 to 2 foot interval. The highest concentration of SVOCs detected was for BBF at a concentration of 2000  $\mu\text{g/kg}$  in this soil sample. SVOCs were not detected in the other soil sample analyzed by QNT.

Concentrations of constituents detected in groundwater samples collected for this unit are presented in Table 4. A complete summary of groundwater analytical results with detection limits is presented in Table 5. Detected concentrations at each sampling location are shown on Drawing 2. No visual or olfactory evidence of contamination, or other evidence of oil, was noted on the boring log or in the field paperwork for the groundwater samples. ACT was the only VOC detected, at a concentration of 25J micrograms per liter ( $\mu\text{g/l}$ ) in boring NK-SB-315, in the groundwater samples analyzed by QNT.

Bis(2-ethylhexyl) phthalate (DEHP) was the only SVOC detected, at a concentration of 11J  $\mu\text{g/l}$  in boring NK-SB-318, in the groundwater samples analyzed by QNT. No other SVOCs were detected in the groundwater samples analyzed by QNT. TPH was detected in one of the four groundwater samples analyzed by QNT at a concentration of 1.1 milligrams per liter ( $\text{mg/l}$ ) in boring NK-SB-317.

**Data Evaluation and Conclusions:** The soil boring and groundwater data were compared to the default numeric criteria included in the RSR. The evaluation of the soils data was based on a comparison to the RDEC, IDEC, and GBPMC. The evaluation of the groundwater data was based on comparison to the residential volatilization criteria (RCV), the industrial/commercial volatilization criteria (IVC), and the surface water protection criteria (SWPC) included in the RSR. For the VOCs detected in soil, no exceedances of the RDEC, IDEC, or the GBPMC were

# DRAFT

noted. For the VOCs detected in groundwater, no exceedances of the RVC, IVC, or the SWPC were noted. Since both the ACT and MC detected in the samples collected for this unit were not detected previously at this unit and they are commonly detected laboratory contaminants, they are not believed to be present at this unit.

For the SVOCs detected in soil, BAP and BBF were detected above the RDEC, IDEC, and GBPMC in boring NK-SB-316 at a depth of 0 to 2 feet. The soil exceedances of the of the RDEC, IDEC, and the GBPMC are shown in Table 6, Table 7, and Table 8, respectively. For the SVOCs detected in groundwater, no exceedances of the RVC, IVC, or the SWPC were noted. DEHP was the only SVOC detected in the groundwater samples collected for this unit and was detected in only one groundwater sample. DEHP was not detected in any of the soil samples collected for this unit. Since DEHP was not detected previously at this unit and it is a commonly detected laboratory contaminants, it is not believed to be present at this unit.

TPH was not detected in any of the soil samples collected for this unit. TPH was detected in one of the four groundwater samples that were collected for this unit. No visual or olfactory evidence of contamination, or other evidence of oil, was noted on the boring log or in the field paperwork for the groundwater samples. It should be noted that TPH does not have default numeric criteria for areas with a GB groundwater classification. For comparison, the default numeric groundwater protection criteria for areas with a GA groundwater classification is 0.5 mg/l, while the detection limit is 1.0 mg/l. With the exception of the SVOCs detected in a single shallow soil sample, no other evidence of a petroleum release exists. While the single detection of TPH in a groundwater sample may seem to indicate that a release of petroleum products has impacted the groundwater, the low level detection with little other evidence of a release seems to indicate that a release has not impacted groundwater.

Based on the presence of SVOCs in the vicinity of the tank, there is evidence that a release of petroleum has occurred. Considering the above investigations, the remediation of the area near the SVOC exceedances, including soil boring NK-SB-316, has been proposed as part of the Klondike Soil Removal Project. Drawing 1 shows the approximate limits of the proposed excavation. The proposed depth of the excavation is four feet. After this volume of soil has been removed, confirmational samples of the excavation side-walls will be collected to confirm removal of the material. The confirmational samples will be analyzed for VOCs, SVOCs, and TPH to confirm that the constituents detected have been removed. Subsequently, with the soil exceedances removed, this unit will be adequately characterized and no further investigation will be warranted at this unit.

## REFERENCES:

Keystone Aerial Surveys, Inc. 1965, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Keystone Aerial Surveys, Inc. 1970, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

# DRAFT

Keystone Aerial Surveys, Inc. 1975, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

P&W Photographic Services Department, 1969, *Aerial Photograph, Negative Number Z-36268*, Pratt & Whitney, East Hartford, CT.

P&W Photographic Services Department, 1987, *Aerial Photograph, Negative Number 87C2398-118*, Pratt & Whitney, East Hartford, CT.

P&W Plant Engineering Department, May 24, 1976, *Plan of Fire Protection System, East Hartford Plant*, Pratt & Whitney Aircraft, East Hartford, CT.

## **TABLES**

**Table 1**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 1 of 2

Sample Information						Analysis Information								
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Extraction	Miscellaneous
NK-SB-264	1026986	3/10/97	0	2	SB	x	x	x						x
NK-SB-264	1026987	3/10/97	2	4	SB	x								
NK-SB-264	1026988	3/10/97	4	6	SB	x	x							x
NK-SB-264	1026989	3/10/97	6	8	SB	x								
NK-SB-264	1026990	3/10/97	8	10	SB	x								
NK-SB-264	1026991	3/10/97	10	12	SB	x								
NK-SB-264	1026992	3/10/97	12	14	SB	x								
NK-SB-264	1026993	3/10/97	14	16	SB	x								
NK-SB-265	1026994	3/10/97	0	2	SB	x	x							x
NK-SB-265	1026995	3/10/97	2	4	SB	x								
NK-SB-265	1026996	3/10/97	4	6	SB	x								
NK-SB-265	1026997	3/10/97	6	8	SB	x	x	x						x
NK-SB-265	1026998	3/10/97	8	10	SB	x								
NK-SB-265	1026999	3/10/97	10	12	SB	x								
NK-SB-266	1027001	3/11/97	0	2	SPB	x								
NK-SB-266	1027002	3/11/97	2	4	SPB	x								
NK-SB-266	1027003	3/11/97	4	6	SB	x								
NK-SB-266	1027004	3/11/97	6	8	SB	x								
NK-SB-266	1027005	3/11/97	8	10	SB	x								
NK-SB-266	1027006	3/11/97	10	12	SB	x								
NK-SB-267	1027007	3/11/97	0	2	SB	x								
NK-SB-267	1027008	3/11/97	2	4	SB	X								
NK-SB-267	1027009	3/11/97	4	6	SB	X								
NK-SB-267	1027010	3/11/97	6	8	SB	X								
NK-SB-315	1634622	6/ 6/97	0	2	SB	x	X	x						x
NK-SB-315	1634623	6/ 6/97	2	4	SB	x								
NK-SB-315	1634624	6/ 6/97	4	6	SB	x								
NK-SB-315	1634625	6/ 6/97	4	6	SB	x								
NK-SB-315	1634613	6/ 6/97	5	8	GW		X	x						x
NK-SB-315	1634626	6/ 6/97	6	8	SB	x								
NK-SB-315	1634627	6/ 6/97	8	10	SB	x	X							x

Notes: 1. Legend: X - Analysed; at least one analyte over the detection limit; x - Analysed, no analytes in group over the detection limit

2. Printed on 06/19/98

**LEA**

***DRAFT***

Page 2 of 2

Notes: 1. Legend: X - Analysed; at least one analyte over the detection limit; x - Analysed, no analytes in group over the detection limit  
2. Printed on 06/19/98



***DRAFT***

Page 1 of 1

[illegible]

Notes: 1. Only Detects Shown  
2. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 1 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264
	Sample ID	1026986	1026986	1026987	1026988	1026988	1026989	1026990
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	13:15	13:15	13:20	13:35	13:35	13:45	13:50
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	AEL97003235	97-1923-427	97-1925-429	AEL97003236	97-1926-430	97-1926-431	97-1927-432
Constituent	Units							
Date Organics Analyzed	-	03/24/1997	03/12/1997	03/12/1997	03/24/1997	03/12/1997	03/12/1997	03/12/1997
Date Physical Analysed	-	04/02/1997			04/02/1997			
Date Semi-volatile Organics Analyzed	-	04/04/1997						
Dinoseb	µg/kg							
Acetylaminofluorene, 2-	µg/kg							
Aramite	µg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg							
Dimethoate	µg/kg							
Disulfoton	µg/kg							
Famphur	µg/kg							
Phorate	µg/kg							
Total Petroleum Hydrocarbons	mg/kg	<40.8			<39.5			
Acenaphthene	µg/kg	<410						
Acenaphthylene	µg/kg	<410 N1						
Acetophenone	µg/kg							
Aminobiphenyl, 4-	µg/kg							
Aniline	µg/kg							
Anthracene	µg/kg	<410						
Benzidine	µg/kg	<410						
Benzo[a]anthracene	µg/kg	<410 N1						
Benzo[a]pyrene	µg/kg	<410 N1						
Benzo[b]fluoranthene	µg/kg	<410 N1						
Benzo[ghi]perylene	µg/kg	<410 N1						
Benzo[k]fluoranthene	µg/kg	<410 N1						
Benzoic Acid	µg/kg							
Benzyl Alcohol	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg	<410						
Bis(2-chloroethyl) Ether	µg/kg	<410						

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 2 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264
	Sample ID	1026986	1026986	1026987	1026988	1026988	1026989	1026990
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	13:15	13:15	13:20	13:35	13:35	13:45	13:50
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	AEL97003235	97-1923-427	97-1925-429	AEL97003236	97-1926-430	97-1926-431	97-1927-432
Constituent	Units							
Bis(2-ethylhexyl) Phthalate	µg/kg	<410						
Bromophenyl Phenyl Ether,4-	µg/kg	<410						
Butyl Benzyl Phthalate	µg/kg	<410						
Carbazole	µg/kg							
Chloro-m-cresol,p-	µg/kg							
Chloroaniline,4-	µg/kg							
Chloronaphthalene,2-	µg/kg	<410						
Chlorophenol,2-	µg/kg	<410						
Chlorophenyl Phenyl Ether,4-	µg/kg	<410						
Chrysene	µg/kg	<410 N1						
Cresol,2-	µg/kg							
Cresol,3-	µg/kg							
Cresol,4-	µg/kg							
Di-n-butyl Phthalate	µg/kg	<410						
Di-n-octyl Phthalate	µg/kg	<410						
Dibenzo[a,h]anthracene	µg/kg	<410 N1						
Dibenzofuran	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg	<410						
Dichlorophenol,2,4-	µg/kg	<410						
Diethyl Phthalate	µg/kg	<410						
Dimethyl Phthalate	µg/kg	<410						
Dimethylaminoazobenzene,4-	µg/kg							
Dimethylbenzidine,3,3'-	µg/kg							
Dimethylbenzo[a]anthracene,7,12-	µg/kg							
Dimethylphenethylamine,alpha,alpha-	µg/kg							
Dimethylphenol,2,4-	µg/kg	<410						
Dinitro-o-cresol,4,6-	µg/kg	<410						

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 3 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264
	Sample ID	1026986	1026986	1026987	1026988	1026988	1026989	1026990
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	13:15	13:15	13:20	13:35	13:35	13:45	13:50
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	AEL97003235	97-1923-427	97-1925-429	AEL97003236	97-1926-430	97-1926-431	97-1927-432
Constituent	Units							
Dinitrobenzene, 1,3-	µg/kg							
Dinitrophenol, 2,4-	µg/kg	<410						
Dinitrotoluene, 2,4-	µg/kg	<410						
Dinitrotoluene, 2,6-	µg/kg	<410						
Diphenylamine	µg/kg							
Diphenylhydrazine, 1,2-	µg/kg	<410						
Ethyl Methanesulfonate	µg/kg							
Fluoranthene	µg/kg	<410 N1						
Fluorene	µg/kg	<410						
Hexachlorobenzene	µg/kg	<410						
Hexachlorobutadiene	µg/kg	<410						
Hexachlorocyclopentadiene	µg/kg	<410						
Hexachloroethane	µg/kg	<410						
Hexachlorophene	µg/kg							
Hexachloropropylene	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg	<410 N1						
Isophorone	µg/kg	<410						
Isosafrole	µg/kg							
Methapyrilene	µg/kg							
Methyl Methanesulfonate	µg/kg							
Methylcholanthrene, 3-	µg/kg							
Methylnaphthalene, 2-	µg/kg							
N-nitroso-di-n-butylamine	µg/kg							
N-nitroso-n-propylamine	µg/kg	<410						
N-nitrosodiethylamine	µg/kg							
N-nitrosodimethylamine	µg/kg	<410						
N-nitrosodiphenylamine	µg/kg	<410						
N-nitrosomethylethylamine	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 4 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264
	Sample ID	1026986	1026986	1026987	1026988	1026988	1026989	1026990
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	13:15	13:15	13:20	13:35	13:35	13:45	13:50
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	AEL97003235	97-1923-427	97-1925-429	AEL97003236	97-1926-430	97-1926-431	97-1927-432
Constituent	Units							
N-nitrosomorpholine	µg/kg							
N-nitrosopiperidine	µg/kg							
Naphthalene	µg/kg	<410						
Naphthoquinone, 1,4-	µg/kg							
Naphthylamine, alpha-	µg/kg							
Naphthylamine, beta-	µg/kg							
Nitro-o-toluidine, 5-	µg/kg							
Nitroaniline, 2-	µg/kg							
Nitroaniline, 3-	µg/kg							
Nitroaniline, 4-	µg/kg							
Nitrobenzene	µg/kg	<410						
Nitrophenol, 2-	µg/kg	<410						
Nitrophenol, 4-	µg/kg	<410						
Nitroquinoline-1-oxide, 4-	µg/kg							
Nitrosopyrrolidine, n-	µg/kg							
Pentachlorophenol	µg/kg	<410						
Phenacetin	µg/kg							
Phenanthrene	µg/kg	<410 N1						
Phenol	µg/kg	<410						
Phenylenediamine, 1,4-	µg/kg							
Picoline, 2-	µg/kg							
Pronamide	µg/kg							
Propane), 2,2'-oxybis(1-chloro-	µg/kg							
Propane), 2,2'-oxybis(2-chloro-	µg/kg	<410						
Pyrene	µg/kg	<410 N1						
Pyridine	µg/kg							
Safrole	µg/kg							
Tetrachlorobenzene, 1,2,4,5-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 5 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264
	Sample ID	1026986	1026986	1026987	1026988	1026988	1026989	1026990
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	13:15	13:15	13:20	13:35	13:35	13:45	13:50
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	AEL97003235	97-1923-427	97-1925-429	AEL97003236	97-1926-430	97-1926-431	97-1927-432
Constituent	Units							
Tetrachlorophenol,2,3,4,6-	µg/kg							
Toluidine,o-	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg	<410						
Trichlorophenol,2,4,5-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg	<410						
Triethyl Phosphorothioate,o,o,o-	µg/kg							
Trinitrobenzene,1,3,5-	µg/kg							
Acetone	µg/kg	<37			<27			
Acetonitrile	µg/kg							
Acrolein	µg/kg	<19			<13			
Acrylonitrile	µg/kg	<19			<13			
Allyl Chloride	µg/kg							
Benzene	µg/kg	<7.5			<5.3			
Benzene (screening)	µg/kg		<8 nc	<6		<7	<8 nc	<7
Bromobenzene	µg/kg	<7.5			<5.3			
Bromoform	µg/kg	<7.5			<5.3			
Carbon Disulfide	µg/kg	<7.5			<5.3			
Carbon Tetrachloride	µg/kg	<7.5			<5.3			
Chlorobenzene	µg/kg	<7.5			<5.3			
Chlorodibromomethane	µg/kg	<7.5			<5.3			
Chloroethane	µg/kg	<7.5			<5.3			
Chloroethyl Vinyl Ether,2-	µg/kg	<7.5			<5.3			
Chloroform	µg/kg	<7.5			<5.3			
Chloroprene,beta-	µg/kg							
Chlorotoluene,o-	µg/kg	<7.5			<5.3			
Chlorotoluene,p-	µg/kg	<7.5			<5.3			
Dibromomethane	µg/kg	<7.5			<5.3			
Dichlorobenzene,1,2-	µg/kg	<7.5			<5.3			

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 6 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264
	Sample ID	1026986	1026986	1026987	1026988	1026988	1026989	1026990
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	13:15	13:15	13:20	13:35	13:35	13:45	13:50
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	AEL97003235	97-1923-427	97-1925-429	AEL97003236	97-1926-430	97-1926-431	97-1927-432
Constituent	Units							
Dichlorobenzene, 1,3-	µg/kg	<7.5			<5.3			
Dichlorobenzene, 1,4-	µg/kg	<7.5			<5.3			
Dichlorobromomethane	µg/kg	<7.5			<5.3			
Dichlorodifluoromethane	µg/kg	<7.5			<5.3			
Dichloroethane, 1,1-	µg/kg	<7.5			<5.3			
Dichloroethane, 1,2-	µg/kg	<7.5			<5.3			
Dichloroethylene, 1,1-	µg/kg	<7.5			<5.3			
Dichloroethylene, 1,2-cis-	µg/kg	<7.5			<5.3			
Dichloroethylene, 1,2-trans-	µg/kg	<7.5			<5.3			
Dichloropropane, 1,2-	µg/kg	<7.5			<5.3			
Dichloropropylene, 1,3-	µg/kg							
Dichloropropylene, 1,3-cis-	µg/kg	<7.5			<5.3			
Dichloropropylene, 1,3-trans-	µg/kg	<7.5			<5.3			
Dioxane, 1,4-	µg/kg							
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg	<7.5			<5.3			
Ethylbenzene (screening)	µg/kg		<18 nc	<13		<15	<18 nc	<14
Ethylene Dibromide	µg/kg							
Hexanone, 2-	µg/kg	<19			<13			
Iodomethane	µg/kg							
Isobutyl Alcohol	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg	<7.5			<5.3			
Methyl Chloride	µg/kg	<7.5			<5.3			
Methyl Ethyl Ketone	µg/kg	<19			<13			
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg	<19			<13			
Methyl-tert-butyl Ether	µg/kg	<7.5			<5.3			

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 7 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-264
	Sample ID	1026986	1026986	1026987	1026988	1026988	1026989	1026990
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	13:15	13:15	13:20	13:35	13:35	13:45	13:50
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	AEL97003235	97-1923-427	97-1925-429	AEL97003236	97-1926-430	97-1926-431	97-1927-432
Constituent	Units							
Methylene Chloride	µg/kg	<7.5			<5.3			
Pentachlorobenzene	µg/kg							
Pentachloroethane	µg/kg							
Pentachloronitrobenzene	µg/kg							
Propionitrile	µg/kg							
Styrene	µg/kg	<7.5			<5.3			
Tetrachloroethane, 1,1,1,2-	µg/kg	<7.5			<5.3			
Tetrachloroethane, 1,1,2,2-	µg/kg	<7.5			<5.3			
Tetrachloroethylene	µg/kg	<7.5			<5.3			
Tetrachloroethylene (screening)	µg/kg		<23 nc	<16		<19	<22 nc	<18
Toluene	µg/kg	<7.5			<5.3			
Toluene (screening)	µg/kg		<13 nc	<9		<11	<13 nc	<10
Trichloroethane, 1,1,1-	µg/kg	<7.5			<5.3			
Trichloroethane, 1,1,1- (screening)	µg/kg		<229 nc	<160		<188	<224 nc	<179
Trichloroethane, 1,1,2-	µg/kg	<7.5			<5.3			
Trichloroethylene	µg/kg	<7.5			<5.3			
Trichloroethylene (screening)	µg/kg		<23 nc	<16		<19	<22 nc	<18
Trichloromonofluoromethane	µg/kg	<7.5			<5.3			
Trichloropropane, 1,2,3-	µg/kg	<7.5			<5.3			
Vinyl Acetate	µg/kg	<7.5			<5.3			
Vinyl Chloride	µg/kg	<7.5			<5.3			
Xylene, o- (screening)	µg/kg		<24 nc	<17		<20	<24 nc	<19
Xylenes (Total)	µg/kg	<7.5			<5.3			
Xylenes, m- & p- (screening)	µg/kg		<12 nc	<8		<10	<12 nc	<9

Notes: 1. Printed on 07/09/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 8 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265
	Sample ID	1026991	1026992	1026993	1026994	1026994	1026995	1026996
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	14:00	14:10	14:15	14:30	14:30	14:35	14:50
	Sample Depth	10' - 12'	12' - 14'	14' - 16'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	LEA	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1928-433	97-1929-434	97-1930-435	AEL97003237	97-1931-436	97-1932-437	97-1933-438
Constituent	Units							
Date Organics Analyzed	-	03/12/1997	03/12/1997	03/12/1997	03/24/1997	03/12/1997	03/12/1997	03/12/1997
Date Physical Analysed	-				04/02/1997			
Date Semi-volatile Organics Analyzed	-							
Dinoseb	µg/kg							
Acetylaminofluorene, 2-	µg/kg							
Aramite	µg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg							
Dimethoate	µg/kg							
Disulfoton	µg/kg							
Famphur	µg/kg							
Phorate	µg/kg							
Total Petroleum Hydrocarbons	mg/kg				<42.8			
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Acetophenone	µg/kg							
Aminobiphenyl, 4-	µg/kg							
Aniline	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Benzoic Acid	µg/kg							
Benzyl Alcohol	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 9 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265
	Sample ID	1026991	1026992	1026993	1026994	1026994	1026995	1026996
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	14:00	14:10	14:15	14:30	14:30	14:35	14:50
	Sample Depth	10' - 12'	12' - 14'	14' - 16'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	LEA	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1928-433	97-1929-434	97-1930-435	AEL97003237	97-1931-436	97-1932-437	97-1933-438
Constituent	Units							
Bis(2-ethylhexyl) Phthalate	µg/kg							
Bromophenyl Phenyl Ether,4-	µg/kg							
Butyl Benzyl Phthalate	µg/kg							
Carbazole	µg/kg							
Chloro-m-cresol,p-	µg/kg							
Chloroaniline,4-	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Cresol,2-	µg/kg							
Cresol,3-	µg/kg							
Cresol,4-	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dibenzofuran	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylaminoazobenzene,4-	µg/kg							
Dimethylbenzidine,3,3'-	µg/kg							
Dimethylbenzo[a]anthracene,7,12-	µg/kg							
Dimethylphenethylamine,alpha,alpha-	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 10 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265
	Sample ID	1026991	1026992	1026993	1026994	1026994	1026995	1026996
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	14:00	14:10	14:15	14:30	14:30	14:35	14:50
	Sample Depth	10' - 12'	12' - 14'	14' - 16'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	LEA	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1928-433	97-1929-434	97-1930-435	AEL97003237	97-1931-436	97-1932-437	97-1933-438
Constituent	Units							
Dinitrobenzene,1,3-	µg/kg							
Dinitrophenol,2,4-	µg/kg							
Dinitrotoluene,2,4-	µg/kg							
Dinitrotoluene,2,6-	µg/kg							
Diphenylamine	µg/kg							
Diphenylhydrazine,1,2-	µg/kg							
Ethyl Methanesulfonate	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Hexachlorophene	µg/kg							
Hexachloropropylene	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
Isosafrole	µg/kg							
Methapyrilene	µg/kg							
Methyl Methanesulfonate	µg/kg							
Methylcholanthrene,3-	µg/kg							
Methylnaphthalene,2-	µg/kg							
N-nitroso-di-n-butylamine	µg/kg							
N-nitroso-n-propylamine	µg/kg							
N-nitrosodiethylamine	µg/kg							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
N-nitrosomethylethylamine	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 11 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265
	Sample ID	1026991	1026992	1026993	1026994	1026994	1026995	1026996
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	14:00	14:10	14:15	14:30	14:30	14:35	14:50
	Sample Depth	10' - 12'	12' - 14'	14' - 16'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	LEA	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1928-433	97-1929-434	97-1930-435	AEL97003237	97-1931-436	97-1932-437	97-1933-438
Constituent	Units							
N-nitrosomorpholine	µg/kg							
N-nitrosopiperidine	µg/kg							
Naphthalene	µg/kg							
Naphthoquinone, 1,4-	µg/kg							
Naphthylamine, alpha-	µg/kg							
Naphthylamine, beta-	µg/kg							
Nitro-o-toluidine, 5-	µg/kg							
Nitroaniline, 2-	µg/kg							
Nitroaniline, 3-	µg/kg							
Nitroaniline, 4-	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol, 2-	µg/kg							
Nitrophenol, 4-	µg/kg							
Nitroquinoline-1-oxide, 4-	µg/kg							
Nitrosopyrrolidine, n-	µg/kg							
Pentachlorophenol	µg/kg							
Phenacetin	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Phenylenediamine, 1,4-	µg/kg							
Picoline, 2-	µg/kg							
Pronamide	µg/kg							
Propane), 2,2'-oxybis(1-chloro-	µg/kg							
Propane), 2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Pyridine	µg/kg							
Safrole	µg/kg							
Tetrachlorobenzene, 1,2,4,5-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 12 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265
	Sample ID	1026991	1026992	1026993	1026994	1026994	1026995	1026996
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	14:00	14:10	14:15	14:30	14:30	14:35	14:50
	Sample Depth	10' - 12'	12' - 14'	14' - 16'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	LEA	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1928-433	97-1929-434	97-1930-435	AEL97003237	97-1931-436	97-1932-437	97-1933-438
Constituent	Units							
Tetrachlorophenol,2,3,4,6-	µg/kg							
Toluidine,o-	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,5-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Triethyl Phosphorothioate,o,o,o-	µg/kg							
Trinitrobenzene,1,3,5-	µg/kg							
Acetone	µg/kg				<31			
Acetonitrile	µg/kg							
Acrolein	µg/kg				<15			
Acrylonitrile	µg/kg				<15			
Allyl Chloride	µg/kg							
Benzene	µg/kg				<6.1			
Benzene (screening)	µg/kg	<7	<7	<8 nc		<8 nc	<8 nc	<7
Bromobenzene	µg/kg				<6.1			
Bromoform	µg/kg				<6.1			
Carbon Disulfide	µg/kg				<6.1			
Carbon Tetrachloride	µg/kg				<6.1			
Chlorobenzene	µg/kg				<6.1			
Chlorodibromomethane	µg/kg				<6.1			
Chloroethane	µg/kg				<6.1			
Chloroethyl Vinyl Ether,2-	µg/kg				<6.1			
Chloroform	µg/kg				<6.1			
Chloroprene,beta-	µg/kg							
Chlorotoluene,o-	µg/kg				<6.1			
Chlorotoluene,p-	µg/kg				<6.1			
Dibromomethane	µg/kg				<6.1			
Dichlorobenzene,1,2-	µg/kg				<6.1			

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 13 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265
	Sample ID	1026991	1026992	1026993	1026994	1026994	1026995	1026996
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	14:00	14:10	14:15	14:30	14:30	14:35	14:50
	Sample Depth	10' - 12'	12' - 14'	14' - 16'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	LEA	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1928-433	97-1929-434	97-1930-435	AEL97003237	97-1931-436	97-1932-437	97-1933-438
Constituent	Units							
Dichlorobenzene, 1,3-	µg/kg				<6.1			
Dichlorobenzene, 1,4-	µg/kg				<6.1			
Dichlorobromomethane	µg/kg				<6.1			
Dichlorodifluoromethane	µg/kg				<6.1			
Dichloroethane, 1,1-	µg/kg				<6.1			
Dichloroethane, 1,2-	µg/kg				<6.1			
Dichloroethylene, 1,1-	µg/kg				<6.1			
Dichloroethylene, 1,2-cis-	µg/kg				<6.1			
Dichloroethylene, 1,2-trans-	µg/kg				<6.1			
Dichloropropane, 1,2-	µg/kg				<6.1			
Dichloropropylene, 1,3-	µg/kg							
Dichloropropylene, 1,3-cis-	µg/kg				<6.1			
Dichloropropylene, 1,3-trans-	µg/kg				<6.1			
Dioxane, 1,4-	µg/kg							
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg				<6.1			
Ethylbenzene (screening)	µg/kg	<15	<15	<18 nc		<18 nc	<17 nc	<15
Ethylene Dibromide	µg/kg							
Hexanone, 2-	µg/kg				<15			
Iodomethane	µg/kg							
Isobutyl Alcohol	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg				<6.1			
Methyl Chloride	µg/kg				<6.1			
Methyl Ethyl Ketone	µg/kg				<15			
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg				<15			
Methyl-tert-butyl Ether	µg/kg				<6.1			

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 14 of 49

	Location ID	NK-SB-264	NK-SB-264	NK-SB-264	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265
	Sample ID	1026991	1026992	1026993	1026994	1026994	1026995	1026996
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/10/1997
	Sample Time	14:00	14:10	14:15	14:30	14:30	14:35	14:50
	Sample Depth	10' - 12'	12' - 14'	14' - 16'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	LEA	LEA	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1928-433	97-1929-434	97-1930-435	AEL97003237	97-1931-436	97-1932-437	97-1933-438
Constituent	Units							
Methylene Chloride	µg/kg				<6.1			
Pentachlorobenzene	µg/kg							
Pentachloroethane	µg/kg							
Pentachloronitrobenzene	µg/kg							
Propionitrile	µg/kg							
Styrene	µg/kg				<6.1			
Tetrachloroethane, 1,1,1,2-	µg/kg				<6.1			
Tetrachloroethane, 1,1,2,2-	µg/kg				<6.1			
Tetrachloroethylene	µg/kg				<6.1			
Tetrachloroethylene (screening)	µg/kg	<19	<19	<23 nc		<22 nc	<22 nc	<19
Toluene	µg/kg				<6.1			
Toluene (screening)	µg/kg	<11	<10	<13 nc		<13 nc	<12 nc	<11
Trichloroethane, 1,1,1,-	µg/kg				<6.1			
Trichloroethane, 1,1,1,- (screening)	µg/kg	<188	<185	<229 nc		<224 nc	<219 nc	<192
Trichloroethane, 1,1,2,-	µg/kg				<6.1			
Trichloroethylene	µg/kg				<6.1			
Trichloroethylene (screening)	µg/kg	<19	<18	<23 nc		<22 nc	<22 nc	<19
Trichloromonofluoromethane	µg/kg				<6.1			
Trichloropropane, 1,2,3,-	µg/kg				<6.1			
Vinyl Acetate	µg/kg				<6.1			
Vinyl Chloride	µg/kg				<6.1			
Xylene, o- (screening)	µg/kg	<20	<20	<24 nc		<24 nc	<23 nc	<20
Xylenes (Total)	µg/kg				<6.1			
Xylenes, m- & p- (screening)	µg/kg	<10	<10	<12 nc		<12 nc	<12 nc	<10

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 15 of 49

	Location ID	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-266	NK-SB-266	NK-SB-266
	Sample ID	1026997	1026997	1026998	1026999	1027001	1027002	1027003
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	14:55	14:55	15:05	15:10	10:20	10:15	10:30
	Sample Depth	6' - 8'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	AEL97003238	97-1934-439	97-1935-440	97-1936-441	97-1937-442	97-1938-443	97-1939-444
Constituent	Units							
Date Organics Analyzed	-	03/24/1997	03/12/1997	03/12/1997	03/12/1997	03/12/1997	03/12/1997	03/12/1997
Date Physical Analysed	-	04/02/1997						
Date Semi-volatile Organics Analyzed	-	04/04/1997						
Dinoseb	µg/kg							
Acetylaminofluorene, 2-	µg/kg							
Aramite	µg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg							
Dimethoate	µg/kg							
Disulfoton	µg/kg							
Famphur	µg/kg							
Phorate	µg/kg							
Total Petroleum Hydrocarbons	mg/kg	<40.2						
Acenaphthene	µg/kg	<400						
Acenaphthylene	µg/kg	<400						
Acetophenone	µg/kg							
Aminobiphenyl, 4-	µg/kg							
Aniline	µg/kg							
Anthracene	µg/kg	<400						
Benzidine	µg/kg	<400						
Benzo[a]anthracene	µg/kg	<400						
Benzo[a]pyrene	µg/kg	<400						
Benzo[b]fluoranthene	µg/kg	<400						
Benzo[ghi]perylene	µg/kg	<400						
Benzo[k]fluoranthene	µg/kg	<400						
Benzoic Acid	µg/kg							
Benzyl Alcohol	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg	<400						
Bis(2-chloroethyl) Ether	µg/kg	<400						

Notes: 1. Printed on 07/09/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 16 of 49

	Location ID	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-266	NK-SB-266	NK-SB-266
	Sample ID	1026997	1026997	1026998	1026999	1027001	1027002	1027003
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	14:55	14:55	15:05	15:10	10:20	10:15	10:30
	Sample Depth	6' - 8'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	AEL97003238	97-1934-439	97-1935-440	97-1936-441	97-1937-442	97-1938-443	97-1939-444
Constituent	Units							
Bis(2-ethylhexyl) Phthalate	µg/kg	<400						
Bromophenyl Phenyl Ether,4-	µg/kg	<400						
Butyl Benzyl Phthalate	µg/kg	<400						
Carbazole	µg/kg							
Chloro-m-cresol,p-	µg/kg							
Chloroaniline,4-	µg/kg							
Chloronaphthalene,2-	µg/kg	<400						
Chlorophenol,2-	µg/kg	<400						
Chlorophenyl Phenyl Ether,4-	µg/kg	<400						
Chrysene	µg/kg	<400						
Cresol,2-	µg/kg							
Cresol,3-	µg/kg							
Cresol,4-	µg/kg							
Di-n-butyl Phthalate	µg/kg	<400						
Di-n-octyl Phthalate	µg/kg	<400						
Dibenzo[a,h]anthracene	µg/kg	<400						
Dibenzofuran	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg	<400						
Dichlorophenol,2,4-	µg/kg	<400						
Diethyl Phthalate	µg/kg	<400						
Dimethyl Phthalate	µg/kg	<400						
Dimethylaminoazobenzene,4-	µg/kg							
Dimethylbenzidine,3,3'-	µg/kg							
Dimethylbenzo[a]anthracene,7,12-	µg/kg							
Dimethylphenethylamine,alpha,alpha-	µg/kg							
Dimethylphenol,2,4-	µg/kg	<400						
Dinitro-o-cresol,4,6-	µg/kg	<400						

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 17 of 49

	Location ID	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-266	NK-SB-266	NK-SB-266
	Sample ID	1026997	1026997	1026998	1026999	1027001	1027002	1027003
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	14:55	14:55	15:05	15:10	10:20	10:15	10:30
	Sample Depth	6' - 8'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	AEL97003238	97-1934-439	97-1935-440	97-1936-441	97-1937-442	97-1938-443	97-1939-444
Constituent	Units							
Dinitrobenzene,1,3-	µg/kg							
Dinitrophenol,2,4-	µg/kg	<400						
Dinitrotoluene,2,4-	µg/kg	<400						
Dinitrotoluene,2,6-	µg/kg	<400						
Diphenylamine	µg/kg							
Diphenylhydrazine,1,2-	µg/kg	<400						
Ethyl Methanesulfonate	µg/kg							
Fluoranthene	µg/kg	<400						
Fluorene	µg/kg	<400						
Hexachlorobenzene	µg/kg	<400						
Hexachlorobutadiene	µg/kg	<400						
Hexachlorocyclopentadiene	µg/kg	<400						
Hexachloroethane	µg/kg	<400						
Hexachlorophene	µg/kg							
Hexachloropropylene	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg	<400						
Isophorone	µg/kg	<400						
Isosafrole	µg/kg							
Methapyrilene	µg/kg							
Methyl Methanesulfonate	µg/kg							
Methylcholanthrene,3-	µg/kg							
Methylnaphthalene,2-	µg/kg							
N-nitroso-di-n-butylamine	µg/kg							
N-nitroso-n-propylamine	µg/kg	<400						
N-nitrosodiethylamine	µg/kg							
N-nitrosodimethylamine	µg/kg	<400						
N-nitrosodiphenylamine	µg/kg	<400						
N-nitrosomethylethylamine	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 18 of 49

	Location ID	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-266	NK-SB-266	NK-SB-266
	Sample ID	1026997	1026997	1026998	1026999	1027001	1027002	1027003
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	14:55	14:55	15:05	15:10	10:20	10:15	10:30
	Sample Depth	6' - 8'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	AEL97003238	97-1934-439	97-1935-440	97-1936-441	97-1937-442	97-1938-443	97-1939-444
Constituent	Units							
N-nitrosomorpholine	µg/kg							
N-nitrosopiperidine	µg/kg							
Naphthalene	µg/kg	<400						
Naphthoquinone, 1,4-	µg/kg							
Naphthylamine, alpha-	µg/kg							
Naphthylamine, beta-	µg/kg							
Nitro-o-toluidine, 5-	µg/kg							
Nitroaniline, 2-	µg/kg							
Nitroaniline, 3-	µg/kg							
Nitroaniline, 4-	µg/kg							
Nitrobenzene	µg/kg	<400						
Nitrophenol, 2-	µg/kg	<400						
Nitrophenol, 4-	µg/kg	<400						
Nitroquinoline-1-oxide, 4-	µg/kg							
Nitrosopyrrolidine, n-	µg/kg							
Pentachlorophenol	µg/kg	<400						
Phenacetin	µg/kg							
Phenanthrene	µg/kg	<400						
Phenol	µg/kg	<400						
Phenylenediamine, 1,4-	µg/kg							
Picoline, 2-	µg/kg							
Pronamide	µg/kg							
Propane), 2,2'-oxybis(1-chloro-	µg/kg							
Propane), 2,2'-oxybis(2-chloro-	µg/kg	<400						
Pyrene	µg/kg	<400						
Pyridine	µg/kg							
Safrole	µg/kg							
Tetrachlorobenzene, 1,2,4,5-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 19 of 49

	Location ID	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-266	NK-SB-266	NK-SB-266
	Sample ID	1026997	1026997	1026998	1026999	1027001	1027002	1027003
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	14:55	14:55	15:05	15:10	10:20	10:15	10:30
	Sample Depth	6' - 8'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	AEL97003238	97-1934-439	97-1935-440	97-1936-441	97-1937-442	97-1938-443	97-1939-444
Constituent	Units							
Tetrachlorophenol,2,3,4,6-	µg/kg							
Toluidine,o-	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg	<400						
Trichlorophenol,2,4,5-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg	<400						
Triethyl Phosphorothioate,o,o,o-	µg/kg							
Trinitrobenzene,1,3,5-	µg/kg							
Acetone	µg/kg	<25						
Acetonitrile	µg/kg							
Acrolein	µg/kg	<13						
Acrylonitrile	µg/kg	<13						
Allyl Chloride	µg/kg							
Benzene	µg/kg	<5.1						
Benzene (screening)	µg/kg		<6	<8 nc	<7	<7	<9 nc	<8 nc
Bromobenzene	µg/kg	<5.1						
Bromoform	µg/kg	<5.1						
Carbon Disulfide	µg/kg	<5.1						
Carbon Tetrachloride	µg/kg	<5.1						
Chlorobenzene	µg/kg	<5.1						
Chlorodibromomethane	µg/kg	<5.1						
Chloroethane	µg/kg	<5.1						
Chloroethyl Vinyl Ether,2-	µg/kg	<5.1						
Chloroform	µg/kg	<5.1						
Chloroprene,beta-	µg/kg							
Chlorotoluene,o-	µg/kg	<5.1						
Chlorotoluene,p-	µg/kg	<5.1						
Dibromomethane	µg/kg	<5.1						
Dichlorobenzene,1,2-	µg/kg	<5.1						

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 20 of 49

	Location ID	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-266	NK-SB-266	NK-SB-266
	Sample ID	1026997	1026997	1026998	1026999	1027001	1027002	1027003
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	14:55	14:55	15:05	15:10	10:20	10:15	10:30
	Sample Depth	6' - 8'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	AEL97003238	97-1934-439	97-1935-440	97-1936-441	97-1937-442	97-1938-443	97-1939-444
Constituent	Units							
Dichlorobenzene, 1,3-	µg/kg	<5.1						
Dichlorobenzene, 1,4-	µg/kg	<5.1						
Dichlorobromomethane	µg/kg	<5.1						
Dichlorodifluoromethane	µg/kg	<5.1						
Dichloroethane, 1,1-	µg/kg	<5.1						
Dichloroethane, 1,2-	µg/kg	<5.1						
Dichloroethylene, 1,1-	µg/kg	<5.1						
Dichloroethylene, 1,2-cis-	µg/kg	<5.1						
Dichloroethylene, 1,2-trans-	µg/kg	<5.1						
Dichloropropane, 1,2-	µg/kg	<5.1						
Dichloropropylene, 1,3-	µg/kg							
Dichloropropylene, 1,3-cis-	µg/kg	<5.1						
Dichloropropylene, 1,3-trans-	µg/kg	<5.1						
Dioxane, 1,4-	µg/kg							
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg	<5.1						
Ethylbenzene (screening)	µg/kg		<13	<18 nc	<14	<15	<19 nc	<18 nc
Ethylene Dibromide	µg/kg							
Hexanone, 2-	µg/kg	<13						
Iodomethane	µg/kg							
Isobutyl Alcohol	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg	<5.1						
Methyl Chloride	µg/kg	<5.1						
Methyl Ethyl Ketone	µg/kg	<13						
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg	<13						
Methyl-tert-butyl Ether	µg/kg	<5.1						

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 21 of 49

	Location ID	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-265	NK-SB-266	NK-SB-266	NK-SB-266
	Sample ID	1026997	1026997	1026998	1026999	1027001	1027002	1027003
	Sample Date	03/10/1997	03/10/1997	03/10/1997	03/10/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	14:55	14:55	15:05	15:10	10:20	10:15	10:30
	Sample Depth	6' - 8'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	AEL97003238	97-1934-439	97-1935-440	97-1936-441	97-1937-442	97-1938-443	97-1939-444
Constituent	Units							
Methylene Chloride	µg/kg	<5.1						
Pentachlorobenzene	µg/kg							
Pentachloroethane	µg/kg							
Pentachloronitrobenzene	µg/kg							
Propionitrile	µg/kg							
Styrene	µg/kg	<5.1						
Tetrachloroethane, 1,1,1,2-	µg/kg	<5.1						
Tetrachloroethane, 1,1,2,2-	µg/kg	<5.1						
Tetrachloroethylene	µg/kg	<5.1						
Tetrachloroethylene (screening)	µg/kg		<16	<23 nc	<18	<19	<23 nc	<23 nc
Toluene	µg/kg	<5.1						
Toluene (screening)	µg/kg		<9	<13 nc	<10	<11	<13 nc	<13 nc
Trichloroethane, 1,1,1-	µg/kg	<5.1						
Trichloroethane, 1,1,1- (screening)	µg/kg		<163	<229 nc	<176	<192	<233 nc	<229 nc
Trichloroethane, 1,1,2-	µg/kg	<5.1						
Trichloroethylene	µg/kg	<5.1						
Trichloroethylene (screening)	µg/kg		<16	<23 nc	<17	<19	<23 nc	<23 nc
Trichloromonofluoromethane	µg/kg	<5.1						
Trichloropropane, 1,2,3-	µg/kg	<5.1						
Vinyl Acetate	µg/kg	<5.1						
Vinyl Chloride	µg/kg	<5.1						
Xylene, o- (screening)	µg/kg		<17	<24 nc	<19	<20	<25 nc	<24 nc
Xylenes (Total)	µg/kg	<5.1						
Xylenes, m- & p- (screening)	µg/kg		<9	<12 nc	<9	<10	<12 nc	<12 nc

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 22 of 49

	Location ID	NK-SB-266	NK-SB-266	NK-SB-266	NK-SB-267	NK-SB-267	NK-SB-267	NK-SB-267
	Sample ID	1027004	1027005	1027006	1027007	1027008	1027009	1027010
	Sample Date	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	10:35	10:45	10:50	11:05	11:10	11:15	11:50
	Sample Depth	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	97-1941-446	97-1942-447	97-1943-448	97-1944-449	97-1949-454	97-1950-455	97-1951-456
Constituent	Units							
Date Organics Analyzed	-	03/12/1997	03/12/1997	03/12/1997	03/12/1997	03/13/1997	03/13/1997	03/13/1997
Date Physical Analysed	-							
Date Semi-volatile Organics Analyzed	-							
Dinoseb	µg/kg							
Acetylaminofluorene, 2-	µg/kg							
Aramite	µg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg							
Dimethoate	µg/kg							
Disulfoton	µg/kg							
Famphur	µg/kg							
Phorate	µg/kg							
Total Petroleum Hydrocarbons	mg/kg							
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Acetophenone	µg/kg							
Aminobiphenyl, 4-	µg/kg							
Aniline	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Benzoic Acid	µg/kg							
Benzyl Alcohol	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 23 of 49

	Location ID	NK-SB-266	NK-SB-266	NK-SB-266	NK-SB-267	NK-SB-267	NK-SB-267	NK-SB-267
	Sample ID	1027004	1027005	1027006	1027007	1027008	1027009	1027010
	Sample Date	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	10:35	10:45	10:50	11:05	11:10	11:15	11:50
	Sample Depth	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	97-1941-446	97-1942-447	97-1943-448	97-1944-449	97-1949-454	97-1950-455	97-1951-456
Constituent	Units							
Bis(2-ethylhexyl) Phthalate	µg/kg							
Bromophenyl Phenyl Ether,4-	µg/kg							
Butyl Benzyl Phthalate	µg/kg							
Carbazole	µg/kg							
Chloro-m-cresol,p-	µg/kg							
Chloroaniline,4-	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Cresol,2-	µg/kg							
Cresol,3-	µg/kg							
Cresol,4-	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dibenzofuran	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylaminoazobenzene,4-	µg/kg							
Dimethylbenzidine,3,3'-	µg/kg							
Dimethylbenzo[a]anthracene,7,12-	µg/kg							
Dimethylphenethylamine, alpha, alpha-	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 24 of 49

	Location ID	NK-SB-266	NK-SB-266	NK-SB-266	NK-SB-267	NK-SB-267	NK-SB-267	NK-SB-267
	Sample ID	1027004	1027005	1027006	1027007	1027008	1027009	1027010
	Sample Date	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	10:35	10:45	10:50	11:05	11:10	11:15	11:50
	Sample Depth	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	97-1941-446	97-1942-447	97-1943-448	97-1944-449	97-1949-454	97-1950-455	97-1951-456
Constituent	Units							
Dinitrobenzene, 1,3-	µg/kg							
Dinitrophenol, 2,4-	µg/kg							
Dinitrotoluene, 2,4-	µg/kg							
Dinitrotoluene, 2,6-	µg/kg							
Diphenylamine	µg/kg							
Diphenylhydrazine, 1,2-	µg/kg							
Ethyl Methanesulfonate	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Hexachlorophene	µg/kg							
Hexachloropropylene	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
Isosafrole	µg/kg							
Methapyrilene	µg/kg							
Methyl Methanesulfonate	µg/kg							
Methylcholanthrene, 3-	µg/kg							
Methylnaphthalene, 2-	µg/kg							
N-nitroso-di-n-butylamine	µg/kg							
N-nitroso-n-propylamine	µg/kg							
N-nitrosodiethylamine	µg/kg							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
N-nitrosomethylethylamine	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 25 of 49

	Location ID	NK-SB-266	NK-SB-266	NK-SB-266	NK-SB-267	NK-SB-267	NK-SB-267	NK-SB-267
	Sample ID	1027004	1027005	1027006	1027007	1027008	1027009	1027010
	Sample Date	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	10:35	10:45	10:50	11:05	11:10	11:15	11:50
	Sample Depth	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	97-1941-446	97-1942-447	97-1943-448	97-1944-449	97-1949-454	97-1950-455	97-1951-456
Constituent	Units							
N-nitrosomorpholine	µg/kg							
N-nitrosopiperidine	µg/kg							
Naphthalene	µg/kg							
Naphthoquinone, 1,4-	µg/kg							
Naphthylamine, alpha-	µg/kg							
Naphthylamine, beta-	µg/kg							
Nitro-o-toluidine, 5-	µg/kg							
Nitroaniline, 2-	µg/kg							
Nitroaniline, 3-	µg/kg							
Nitroaniline, 4-	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol, 2-	µg/kg							
Nitrophenol, 4-	µg/kg							
Nitroquinoline-1-oxide, 4-	µg/kg							
Nitrosopyrrolidine, n-	µg/kg							
Pentachlorophenol	µg/kg							
Phenacetin	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Phenylenediamine, 1,4-	µg/kg							
Picoline, 2-	µg/kg							
Pronamide	µg/kg							
Propane), 2,2'-oxybis(1-chloro-	µg/kg							
Propane), 2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Pyridine	µg/kg							
Safrole	µg/kg							
Tetrachlorobenzene, 1,2,4,5-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 26 of 49

	Location ID	NK-SB-266	NK-SB-266	NK-SB-266	NK-SB-267	NK-SB-267	NK-SB-267	NK-SB-267
	Sample ID	1027004	1027005	1027006	1027007	1027008	1027009	1027010
	Sample Date	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	10:35	10:45	10:50	11:05	11:10	11:15	11:50
	Sample Depth	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	97-1941-446	97-1942-447	97-1943-448	97-1944-449	97-1949-454	97-1950-455	97-1951-456
Constituent	Units							
Tetrachlorophenol,2,3,4,6-	µg/kg							
Toluidine,o-	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,5-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Triethyl Phosphorothioate,o,o,o-	µg/kg							
Trinitrobenzene,1,3,5-	µg/kg							
Acetone	µg/kg							
Acetonitrile	µg/kg							
Acrolein	µg/kg							
Acrylonitrile	µg/kg							
Allyl Chloride	µg/kg							
Benzene	µg/kg							
Benzene (screening)	µg/kg	<8	<8	<7	<9 nc	<8 nc	<8	<7
Bromobenzene	µg/kg							
Bromoform	µg/kg							
Carbon Disulfide	µg/kg							
Carbon Tetrachloride	µg/kg							
Chlorobenzene	µg/kg							
Chlorodibromomethane	µg/kg							
Chloroethane	µg/kg							
Chloroethyl Vinyl Ether,2-	µg/kg							
Chloroform	µg/kg							
Chloroprene,beta-	µg/kg							
Chlorotoluene,o-	µg/kg							
Chlorotoluene,p-	µg/kg							
Dibromomethane	µg/kg							
Dichlorobenzene,1,2-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 27 of 49

	Location ID	NK-SB-266	NK-SB-266	NK-SB-266	NK-SB-267	NK-SB-267	NK-SB-267	NK-SB-267
	Sample ID	1027004	1027005	1027006	1027007	1027008	1027009	1027010
	Sample Date	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	10:35	10:45	10:50	11:05	11:10	11:15	11:50
	Sample Depth	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	97-1941-446	97-1942-447	97-1943-448	97-1944-449	97-1949-454	97-1950-455	97-1951-456
Constituent	Units							
Dichlorobenzene, 1,3-	µg/kg							
Dichlorobenzene, 1,4-	µg/kg							
Dichlorobromomethane	µg/kg							
Dichlorodifluoromethane	µg/kg							
Dichloroethane, 1,1-	µg/kg							
Dichloroethane, 1,2-	µg/kg							
Dichloroethylene, 1,1-	µg/kg							
Dichloroethylene, 1,2-cis-	µg/kg							
Dichloroethylene, 1,2-trans-	µg/kg							
Dichloropropane, 1,2-	µg/kg							
Dichloropropylene, 1,3-	µg/kg							
Dichloropropylene, 1,3-cis-	µg/kg							
Dichloropropylene, 1,3-trans-	µg/kg							
Dioxane, 1,4-	µg/kg							
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg							
Ethylbenzene (screening)	µg/kg	<17	<16	<15	<19 nc	<18 nc	<16	<15
Ethylene Dibromide	µg/kg							
Hexanone, 2-	µg/kg							
Iodomethane	µg/kg							
Isobutyl Alcohol	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg							
Methyl Chloride	µg/kg							
Methyl Ethyl Ketone	µg/kg							
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg							
Methyl-tert-butyl Ether	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 28 of 49

	Location ID	NK-SB-266	NK-SB-266	NK-SB-266	NK-SB-267	NK-SB-267	NK-SB-267	NK-SB-267
	Sample ID	1027004	1027005	1027006	1027007	1027008	1027009	1027010
	Sample Date	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997	03/11/1997
	Sample Time	10:35	10:45	10:50	11:05	11:10	11:15	11:50
	Sample Depth	6' - 8'	8' - 10'	10' - 12'	0' - 2'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	97-1941-446	97-1942-447	97-1943-448	97-1944-449	97-1949-454	97-1950-455	97-1951-456
Constituent	Units							
Methylene Chloride	µg/kg							
Pentachlorobenzene	µg/kg							
Pentachloroethane	µg/kg							
Pentachloronitrobenzene	µg/kg							
Propionitrile	µg/kg							
Styrene	µg/kg							
Tetrachloroethane, 1,1,1,2-	µg/kg							
Tetrachloroethane, 1,1,2,2-	µg/kg							
Tetrachloroethylene	µg/kg							
Tetrachloroethylene (screening)	µg/kg	<21	<21	<19	<24 nc	20 J nc	6 J	5 J
Toluene	µg/kg							
Toluene (screening)	µg/kg	<12	<12	<10	<13 nc	17 E nc	<11	<11
Trichloroethane, 1,1,1,-	µg/kg							
Trichloroethane, 1,1,1,- (screening)	µg/kg	<211	<207	<185	<239 nc	<224 nc	<203	<188
Trichloroethane, 1,1,2,-	µg/kg							
Trichloroethylene	µg/kg							
Trichloroethylene (screening)	µg/kg	<21	<20	<18	<24 nc	<22 nc	<20	<19
Trichloromonofluoromethane	µg/kg							
Trichloropropane, 1,2,3,-	µg/kg							
Vinyl Acetate	µg/kg							
Vinyl Chloride	µg/kg							
Xylene,o- (screening)	µg/kg	<22	<22	<20	<25 nc	<24 nc	<22	<20
Xylenes (Total)	µg/kg							
Xylenes,m- & p- (screening)	µg/kg	<11	<11	<10	<13 nc	10 J nc	<11	<10

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 29 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315
	Sample ID	1634622	1634622	1634623	1634624	1634625	1634626	1634627
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:05	10:05	10:10	10:20	10:20	10:25	10:35
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	LEA	LEA	LEA
	Lab. Number	35-3464-035	A7F130102002	35-3465-036	35-3469-040	35-3470-041	35-3471-042	35-3477-048
Constituent	Units							
Date Organics Analyzed	-	06/09/1997	06/19/1997	06/09/1997	06/09/1997	06/09/1997	06/09/1997	06/09/1997
Date Physical Analysed	-		06/20/1997					
Date Semi-volatile Organics Analyzed	-		06/21/1997					
Dinoseb	µg/kg		<440 U j					
Acetylaminofluorene,2-	µg/kg		<440 U j					
Aramite	µg/kg		<440 U j					
Dibromo-3-chloropropane,1,2-	µg/kg		<6.7 U r					
Dimethoate	µg/kg		<440 U j					
Disulfoton	µg/kg		<440 U j					
Famphur	µg/kg		<440 U j					
Phorate	µg/kg		<440 U j					
Total Petroleum Hydrocarbons	mg/kg		<67 U					
Acenaphthene	µg/kg		<440 U j					
Acenaphthylene	µg/kg		<440 U j					
Acetophenone	µg/kg		<440 U j					
Aminobiphenyl,4-	µg/kg		<440 U j					
Aniline	µg/kg		<440 U j					
Anthracene	µg/kg		<440 U j					
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg		<440 U j					
Benzo[a]pyrene	µg/kg		<440 U j					
Benzo[b]fluoranthene	µg/kg		<440 U j					
Benzo[ghi]perylene	µg/kg		<440 U j					
Benzo[k]fluoranthene	µg/kg		<440 U j					
Benzoic Acid	µg/kg		<440 U j					
Benzyl Alcohol	µg/kg		<900 U j					
Bis(2-chloroethoxy)methane	µg/kg		<440 U j					
Bis(2-chloroethyl) Ether	µg/kg		<440 U j					

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 30 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315
	Sample ID	1634622	1634622	1634623	1634624	1634625	1634626	1634627
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:05	10:05	10:10	10:20	10:20	10:25	10:35
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	LEA	LEA	LEA
	Lab. Number	35-3464-035	A7F130102002	35-3465-036	35-3469-040	35-3470-041	35-3471-042	35-3477-048
Constituent	Units							
Bis(2-ethylhexyl) Phthalate	µg/kg		<440 U j					
Bromophenyl Phenyl Ether, 4-	µg/kg		<440 U j					
Butyl Benzyl Phthalate	µg/kg		<440 U j					
Carbazole	µg/kg		<440 U j					
Chloro-m-cresol, p-	µg/kg		<900 U j					
Chloroaniline, 4-	µg/kg		<440 U j					
Chloronaphthalene, 2-	µg/kg		<440 U j					
Chlorophenol, 2-	µg/kg		<440 U j					
Chlorophenyl Phenyl Ether, 4-	µg/kg		<440 U j					
Chrysene	µg/kg		<440 U j					
Cresol, 2-	µg/kg		<440 U j					
Cresol, 3-	µg/kg		<440 U j					
Cresol, 4-	µg/kg		<440 U j					
Di-n-butyl Phthalate	µg/kg		<440 U j					
Di-n-octyl Phthalate	µg/kg		<440 U j					
Dibenzo[a,h]anthracene	µg/kg		<440 U j					
Dibenzofuran	µg/kg		<440 U j					
Dichloro-2-butylene, 1,4-trans-	µg/kg		<6.7 U r					
Dichlorobenzidine, 3,3'-	µg/kg		<900 U j					
Dichlorophenol, 2,4-	µg/kg		<440 U j					
Diethyl Phthalate	µg/kg		<440 U j					
Dimethyl Phthalate	µg/kg		<440 U j					
Dimethylaminoazobenzene, 4-	µg/kg		<440 U j					
Dimethylbenzidine, 3,3'-	µg/kg		<440 U j					
Dimethylbenzo[a]anthracene, 7,12-	µg/kg		<440 U j					
Dimethylphenethylamine, alpha, alpha-	µg/kg		<440 U j					
Dimethylphenol, 2,4-	µg/kg		<440 U j					
Dinitro-o-cresol, 4,6-	µg/kg		<1100 U j					

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 31 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315
	Sample ID	1634622	1634622	1634623	1634624	1634625	1634626	1634627
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:05	10:05	10:10	10:20	10:20	10:25	10:35
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	LEA	LEA	LEA
	Lab. Number	35-3464-035	A7F130102002	35-3465-036	35-3469-040	35-3470-041	35-3471-042	35-3477-048
Constituent	Units							
Dinitrobenzene, 1,3-	µg/kg		<440 U j					
Dinitrophenol, 2,4-	µg/kg		<1100 U j					
Dinitrotoluene, 2,4-	µg/kg		<440 U j					
Dinitrotoluene, 2,6-	µg/kg		<440 U j					
Diphenylamine	µg/kg		<440 U j					
Diphenylhydrazine, 1,2-	µg/kg							
Ethyl Methanesulfonate	µg/kg		<440 U j					
Fluoranthene	µg/kg		<440 U j					
Fluorene	µg/kg		<440 U j					
Hexachlorobenzene	µg/kg		<440 U j					
Hexachlorobutadiene	µg/kg		<440 U j					
Hexachlorocyclopentadiene	µg/kg		<440 U j					
Hexachloroethane	µg/kg		<440 U j					
Hexachlorophene	µg/kg		<440 U j					
Hexachloropropylene	µg/kg		<440 U j					
Indeno(1,2,3-cd)pyrene	µg/kg		<440 U j					
Isophorone	µg/kg		<440 U j					
Isosafrole	µg/kg		<440 U j					
Methapyrilene	µg/kg		<440 U j					
Methyl Methanesulfonate	µg/kg		<440 U j					
Methylcholanthrene, 3-	µg/kg		<890 U j					
Methylnaphthalene, 2-	µg/kg		<440 U j					
N-nitroso-di-n-butylamine	µg/kg		<440 U j					
N-nitroso-n-propylamine	µg/kg		<440 U j					
N-nitrosodiethylamine	µg/kg		<440 U j					
N-nitrosodimethylamine	µg/kg		<440 U j					
N-nitrosodiphenylamine	µg/kg		<440 U j					
N-nitrosomethylethylamine	µg/kg		<440 U j					

Notes: 1. Printed on 07/09/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 32 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315
	Sample ID	1634622	1634622	1634623	1634624	1634625	1634626	1634627
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:05	10:05	10:10	10:20	10:20	10:25	10:35
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	LEA	LEA	LEA
	Lab. Number	35-3464-035	A7F130102002	35-3465-036	35-3469-040	35-3470-041	35-3471-042	35-3477-048
Constituent	Units							
N-nitrosomorpholine	µg/kg		<440 U j					
N-nitrosopiperidine	µg/kg		<440 U j					
Naphthalene	µg/kg		<440 U j					
Naphthoquinone, 1,4-	µg/kg		<440 U j					
Naphthylamine, alpha-	µg/kg		<440 U j					
Naphthylamine, beta-	µg/kg		<440 U j					
Nitro-o-toluidine, 5-	µg/kg		<440 U j					
Nitroaniline, 2-	µg/kg		<1100 U j					
Nitroaniline, 3-	µg/kg		<1100 U j					
Nitroaniline, 4-	µg/kg		<1100 U j					
Nitrobenzene	µg/kg		<440 U j					
Nitrophenol, 2-	µg/kg		<440 U j					
Nitrophenol, 4-	µg/kg		<1100 U j					
Nitroquinoline-1-oxide, 4-	µg/kg		<440 U j					
Nitrosopyrrolidine, n-	µg/kg		<440 U j					
Pentachlorophenol	µg/kg		<1100 U j					
Phenacetin	µg/kg		<440 U j					
Phenanthrene	µg/kg		<440 U j					
Phenol	µg/kg		<440 U j					
Phenylenediamine, 1,4-	µg/kg		<440 U j					
Picoline, 2-	µg/kg		<440 U j					
Pronamide	µg/kg		<440 U j					
Propane), 2,2'-oxybis(1-chloro-	µg/kg		<440 U j					
Propane), 2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg		<440 U j					
Pyridine	µg/kg		<440 U j					
Saffrole	µg/kg		<440 U j					
Tetrachlorobenzene, 1,2,4,5-	µg/kg		<440 U j					

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 33 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315
	Sample ID	1634622	1634622	1634623	1634624	1634625	1634626	1634627
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:05	10:05	10:10	10:20	10:20	10:25	10:35
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	LEA	LEA	LEA
	Lab. Number	35-3464-035	A7F130102002	35-3465-036	35-3469-040	35-3470-041	35-3471-042	35-3477-048
Constituent	Units							
Tetrachlorophenol,2,3,4,6-	µg/kg		<440 U j					
Toluidine,o-	µg/kg		<440 U j					
Trichlorobenzene,1,2,4-	µg/kg		<440 U j					
Trichlorophenol,2,4,5-	µg/kg		<440 U j					
Trichlorophenol,2,4,6-	µg/kg		<440 U j					
Triethyl Phosphorothioate,o,o,o-	µg/kg		<440 U j					
Trinitrobenzene,1,3,5-	µg/kg		<440 U j					
Acetone	µg/kg		<130 U r					
Acetonitrile	µg/kg		<67 U r					
Acrolein	µg/kg		<67 U r					
Acrylonitrile	µg/kg		<130 U r					
Allyl Chloride	µg/kg		<130 U r					
Benzene	µg/kg		<6.7 U r					
Benzene (screening)	µg/kg	<16		<14	<17 nc	<13	<14	<17 nc
Bromobenzene	µg/kg							
Bromoform	µg/kg		<6.7 U r					
Carbon Disulfide	µg/kg		<6.7 U r					
Carbon Tetrachloride	µg/kg		<6.7 U r					
Chlorobenzene	µg/kg		<6.7 U r					
Chlorodibromomethane	µg/kg		<6.7 U r					
Chloroethane	µg/kg		<13 U r					
Chloroethyl Vinyl Ether,2-	µg/kg							
Chloroform	µg/kg		<6.7 U r					
Chloroprene,beta-	µg/kg		<6.7 U r					
Chlorotoluene,o-	µg/kg							
Chlorotoluene,p-	µg/kg							
Dibromomethane	µg/kg		<6.7 U r					
Dichlorobenzene,1,2-	µg/kg		<440 U j					

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 34 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315
	Sample ID	1634622	1634622	1634623	1634624	1634625	1634626	1634627
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:05	10:05	10:10	10:20	10:20	10:25	10:35
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	LEA	LEA	LEA
	Lab. Number	35-3464-035	A7F130102002	35-3465-036	35-3469-040	35-3470-041	35-3471-042	35-3477-048
Constituent	Units							
Dichlorobenzene,1,3-	µg/kg		<440 U <sub>j</sub>					
Dichlorobenzene,1,4-	µg/kg		<440 U <sub>j</sub>					
Dichlorobromomethane	µg/kg		<6.7 U <sub>r</sub>					
Dichlorodifluoromethane	µg/kg		<6.7 U <sub>r</sub>					
Dichloroethane,1,1-	µg/kg		<6.7 U <sub>r</sub>					
Dichloroethane,1,2-	µg/kg		<6.7 U <sub>r</sub>					
Dichloroethylene,1,1-	µg/kg		<6.7 U <sub>r</sub>					
Dichloroethylene,1,2-cis-	µg/kg		<6.7 U <sub>r</sub>					
Dichloroethylene,1,2-trans-	µg/kg		<6.7 U <sub>r</sub>					
Dichloropropane,1,2-	µg/kg		<6.7 U <sub>r</sub>					
Dichloropropylene,1,3-	µg/kg		<6.7 U <sub>r</sub>					
Dichloropropylene,1,3-cis-	µg/kg							
Dichloropropylene,1,3-trans-	µg/kg							
Dioxane,1,4-	µg/kg		<200 U <sub>r</sub>					
Ethyl Methacrylate	µg/kg		<6.7 U <sub>r</sub>					
Ethylbenzene	µg/kg		<6.7 U <sub>r</sub>					
Ethylbenzene (screening)	µg/kg	<23		<20	<25 nc	<19	<20	<25 nc
Ethylene Dibromide	µg/kg		<6.7 U <sub>r</sub>					
Hexanone,2-	µg/kg		<6.7 U <sub>r</sub>					
Iodomethane	µg/kg		<6.7 U <sub>r</sub>					
Isobutyl Alcohol	µg/kg		<6.7 U <sub>r</sub>					
Methacrylonitrile	µg/kg		<6.7 U <sub>r</sub>					
Methyl Bromide	µg/kg		<13 U <sub>r</sub>					
Methyl Chloride	µg/kg		<13 U <sub>r</sub>					
Methyl Ethyl Ketone	µg/kg		<130 U <sub>r</sub>					
Methyl Methacrylate	µg/kg		<6.7 U <sub>r</sub>					
Methyl-2-pentanone,4-	µg/kg		<13 U <sub>r</sub>					
Methyl-tert-butyl Ether	µg/kg		<6.7 U <sub>r</sub>					

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 35 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315	NK-SB-315
	Sample ID	1634622	1634622	1634623	1634624	1634625	1634626	1634627
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:05	10:05	10:10	10:20	10:20	10:25	10:35
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	LEA	LEA	LEA
	Lab. Number	35-3464-035	A7F130102002	35-3465-036	35-3469-040	35-3470-041	35-3471-042	35-3477-048
Constituent	Units							
Methylene Chloride	µg/kg		3.4 J j					
Pentachlorobenzene	µg/kg		<440 U j					
Pentachloroethane	µg/kg		<440 U j					
Pentachloronitrobenzene	µg/kg		<440 U j					
Propionitrile	µg/kg		<27 U r					
Styrene	µg/kg		<6.7 U r					
Tetrachloroethane, 1,1,1,2-	µg/kg		<6.7 U r					
Tetrachloroethane, 1,1,2,2-	µg/kg		<6.7 U r					
Tetrachloroethylene	µg/kg		<6.7 U r					
Tetrachloroethylene (screening)	µg/kg	<24		<21	<26 nc	<20	<21	<26 nc
Toluene	µg/kg		<6.7 U r					
Toluene (screening)	µg/kg	<23		<19	<25 nc	<18	<20	<24 nc
Trichloroethane, 1,1,1-	µg/kg		<6.7 U r					
Trichloroethane, 1,1,1- (screening)	µg/kg	<390		<336	<424 nc	<315	<342	<415 nc
Trichloroethane, 1,1,2-	µg/kg		<6.7 U r					
Trichloroethylene	µg/kg		<6.7 U r					
Trichloroethylene (screening)	µg/kg	<38		<33	<41 nc	<31	<33	<40 nc
Trichloromono fluoromethane	µg/kg		<6.7 U r					
Trichloropropane, 1,2,3-	µg/kg		<6.7 U r					
Vinyl Acetate	µg/kg		<6.7 U r					
Vinyl Chloride	µg/kg		<13 U r					
Xylene, o- (screening)	µg/kg	<32		<27	<35 nc	<26	<28	<34 nc
Xylenes (Total)	µg/kg		<6.7 U r					
Xylenes, m- & p- (screening)	µg/kg	<17		<14	<18 nc	<13	<15	<18 nc

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 36 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316
	Sample ID	1634627	1634628	1634629	1634629	1634630	1634630	1634631
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:35	10:40	10:45	10:45	10:50	10:50	11:00
	Sample Depth	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	QUAN	LEA
	Lab. Number	A7F130102007	35-3476-047	35-3478-049	A7F130102009	35-3479-050	A7F130102010	35-3480-051
Constituent	Units							
Date Organics Analyzed	-	06/19/1997	06/09/1997	06/09/1997	06/19/1997	06/09/1997	06/20/1997	06/09/1997
Date Physical Analysed	-	06/20/1997			06/20/1997		06/20/1997	
Date Semi-volatile Organics Analyzed	-				06/21/1997			
Dinoseb	µg/kg				<390 U j			
Acetylaminofluorene, 2-	µg/kg				<390 U j			
Aramite	µg/kg				<390 U j			
Dibromo-3-chloropropane, 1,2-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dimethoate	µg/kg				<390 U j			
Disulfoton	µg/kg				<390 U j			
Famphur	µg/kg				<390 U j			
Phorate	µg/kg				<390 U j			
Total Petroleum Hydrocarbons	mg/kg	<62 U			<59 U		<59 U	
Acenaphthene	µg/kg				<390 U j			
Acenaphthylene	µg/kg				<390 U j			
Acetophenone	µg/kg				<390 U j			
Aminobiphenyl, 4-	µg/kg				<390 U j			
Aniline	µg/kg				<390 U j			
Anthracene	µg/kg				<390 U j			
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg				670 j			
Benzo[a]pyrene	µg/kg				1400 j			
Benzo[b]fluoranthene	µg/kg				2000 j			
Benzo[ghi]perylene	µg/kg				930 j			
Benzo[k]fluoranthene	µg/kg				830 j			
Benzoic Acid	µg/kg				650 j			
Benzyl Alcohol	µg/kg				<790 U j			
Bis(2-chloroethoxy)methane	µg/kg				<390 U j			
Bis(2-chloroethyl) Ether	µg/kg				<390 U j			

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 37 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316
	Sample ID	1634627	1634628	1634629	1634629	1634630	1634630	1634631
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:35	10:40	10:45	10:45	10:50	10:50	11:00
	Sample Depth	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	QUAN	LEA
	Lab. Number	A7F130102007	35-3476-047	35-3478-049	A7F130102009	35-3479-050	A7F130102010	35-3480-051
Constituent	Units							
Bis(2-ethylhexyl) Phthalate	µg/kg				<90 U j			
Bromophenyl Phenyl Ether, 4-	µg/kg				<90 U j			
Butyl Benzyl Phthalate	µg/kg				<90 U j			
Carbazole	µg/kg				<90 U j			
Chloro-m-cresol, p-	µg/kg				<790 U j			
Chloroaniline, 4-	µg/kg				<90 U j			
Chloronaphthalene, 2-	µg/kg				<90 U j			
Chlorophenol, 2-	µg/kg				<90 U j			
Chlorophenyl Phenyl Ether, 4-	µg/kg				<90 U j			
Chrysene	µg/kg				980 j			
Cresol, 2-	µg/kg				<90 U j			
Cresol, 3-	µg/kg				<90 U j			
Cresol, 4-	µg/kg				<90 U j			
Di-n-butyl Phthalate	µg/kg				<90 U j			
Di-n-octyl Phthalate	µg/kg				<90 U j			
Dibenzo[a,h]anthracene	µg/kg				<90 U j			
Dibenzofuran	µg/kg				<90 U j			
Dichloro-2-butylene, 1,4-trans-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichlorobenzidine, 3,3'-	µg/kg				<790 U j			
Dichlorophenol, 2,4-	µg/kg				<90 U j			
Diethyl Phthalate	µg/kg				<90 U j			
Dimethyl Phthalate	µg/kg				<90 U j			
Dimethylaminoazobenzene, 4-	µg/kg				<90 U j			
Dimethylbenzidine, 3,3'-	µg/kg				<90 U j			
Dimethylbenzo[a]anthracene, 7,12-	µg/kg				<90 U j			
Dimethylphenethylamine, alpha, alpha-	µg/kg				<90 U j			
Dimethylphenol, 2,4-	µg/kg				<90 U j			
Dinitro-o-cresol, 4,6-	µg/kg				<970 U j			

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 38 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316
	Sample ID	1634627	1634628	1634629	1634629	1634630	1634630	1634631
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:35	10:40	10:45	10:45	10:50	10:50	11:00
	Sample Depth	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	QUAN	LEA
	Lab. Number	A7F130102007	35-3476-047	35-3478-049	A7F130102009	35-3479-050	A7F130102010	35-3480-051
Constituent	Units							
Dinitrobenzene,1,3-	µg/kg				<390 U j			
Dinitrophenol,2,4-	µg/kg				<970 U j			
Dinitrotoluene,2,4-	µg/kg				<390 U j			
Dinitrotoluene,2,6-	µg/kg				<390 U j			
Diphenylamine	µg/kg				<390 U j			
Diphenylhydrazine,1,2-	µg/kg							
Ethyl Methanesulfonate	µg/kg				<390 U j			
Fluoranthene	µg/kg				500 j			
Fluorene	µg/kg				<390 U j			
Hexachlorobenzene	µg/kg				<390 U j			
Hexachlorobutadiene	µg/kg				<390 U j			
Hexachlorocyclopentadiene	µg/kg				<390 U j			
Hexachloroethane	µg/kg				<390 U j			
Hexachlorophene	µg/kg				<390 U j			
Hexachloropropylene	µg/kg				<390 U j			
Indeno(1,2,3-cd)pyrene	µg/kg				920 j			
Isophorone	µg/kg				<390 U j			
Isosafrole	µg/kg				<390 U j			
Methapyrilene	µg/kg				<390 U j			
Methyl Methanesulfonate	µg/kg				<390 U j			
Methylcholanthrene,3-	µg/kg				<770 U j			
Methylnaphthalene,2-	µg/kg				<390 U j			
N-nitroso-di-n-butylamine	µg/kg				<390 U j			
N-nitroso-n-propylamine	µg/kg				<390 U j			
N-nitrosodiethylamine	µg/kg				<390 U j			
N-nitrosodimethylamine	µg/kg				<390 U j			
N-nitrosodiphenylamine	µg/kg				<390 U j			
N-nitrosomethylethylamine	µg/kg				<390 U j			

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 39 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316
	Sample ID	1634627	1634628	1634629	1634629	1634630	1634630	1634631
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:35	10:40	10:45	10:45	10:50	10:50	11:00
	Sample Depth	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	QUAN	LEA
	Lab. Number	A7F130102007	35-3476-047	35-3478-049	A7F130102009	35-3479-050	A7F130102010	35-3480-051
Constituent	Units							
N-nitrosomorpholine	µg/kg				<390 Uj			
N-nitrosopiperidine	µg/kg				<390 Uj			
Naphthalene	µg/kg				<390 Uj			
Naphthoquinone, 1,4-	µg/kg				<390 Uj			
Naphthylamine, alpha-	µg/kg				<390 Uj			
Naphthylamine, beta-	µg/kg				<390 Uj			
Nitro-o-toluidine, 5-	µg/kg				<390 Uj			
Nitroaniline, 2-	µg/kg				<970 Uj			
Nitroaniline, 3-	µg/kg				<970 Uj			
Nitroaniline, 4-	µg/kg				<970 Uj			
Nitrobenzene	µg/kg				<390 Uj			
Nitrophenol, 2-	µg/kg				<390 Uj			
Nitrophenol, 4-	µg/kg				<970 Uj			
Nitroquinoline-1-oxide, 4-	µg/kg				<390 Uj			
Nitrosopyrrolidine, n-	µg/kg				<390 Uj			
Pentachlorophenol	µg/kg				<970 Uj			
Phenacetin	µg/kg				<390 Uj			
Phenanthrene	µg/kg				<390 Uj			
Phenol	µg/kg				<390 Uj			
Phenylenediamine, 1,4-	µg/kg				<390 Uj			
Picoline, 2-	µg/kg				<390 Uj			
Pronamide	µg/kg				<390 Uj			
Propane), 2,2'-oxybis(1-chloro-	µg/kg				<390 Uj			
Propane), 2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg				810 j			
Pyridine	µg/kg				<390 Uj			
Safrole	µg/kg				<390 Uj			
Tetrachlorobenzene, 1,2,4,5-	µg/kg				<390 Uj			

Notes: 1. Printed on 07/09/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 40 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316
	Sample ID	1634627	1634628	1634629	1634629	1634630	1634630	1634631
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:35	10:40	10:45	10:45	10:50	10:50	11:00
	Sample Depth	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	QUAN	LEA
	Lab. Number	A7F130102007	35-3476-047	35-3478-049	A7F130102009	35-3479-050	A7F130102010	35-3480-051
Constituent	Units							
Tetrachlorophenol,2,3,4,6-	µg/kg				<390 U <sub>j</sub>			
Toluidine,o-	µg/kg				<390 U <sub>j</sub>			
Trichlorobenzene,1,2,4-	µg/kg				<390 U <sub>j</sub>			
Trichlorophenol,2,4,5-	µg/kg				<390 U <sub>j</sub>			
Trichlorophenol,2,4,6-	µg/kg				<390 U <sub>j</sub>			
Triethyl Phosphorothioate,o,o,o-	µg/kg				<390 U <sub>j</sub>			
Trinitrobenzene,1,3,5-	µg/kg				<390 U <sub>j</sub>			
Acetone	µg/kg	10 J <sub>j</sub>			<120 U <sub>r</sub>		<120 U <sub>r</sub>	
Acetonitrile	µg/kg	<62 U <sub>r</sub>			<59 U <sub>r</sub>		<59 U <sub>r</sub>	
Acrolein	µg/kg	<62 U <sub>r</sub>			<59 U <sub>r</sub>		<59 U <sub>r</sub>	
Acrylonitrile	µg/kg	<120 U <sub>r</sub>			<120 U <sub>r</sub>		<120 U <sub>r</sub>	
Allyl Chloride	µg/kg	<120 U <sub>r</sub>			<120 U <sub>r</sub>		<120 U <sub>r</sub>	
Benzene	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Benzene (screening)	µg/kg		<16	<16		<14		<13
Bromobenzene	µg/kg							
Bromoform	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Carbon Disulfide	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Carbon Tetrachloride	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Chlorobenzene	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Chlorodibromomethane	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Chloroethane	µg/kg	<12 U <sub>r</sub>			<12 U <sub>r</sub>		<12 U <sub>r</sub>	
Chloroethyl Vinyl Ether,2-	µg/kg							
Chloroform	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Chloroprene,beta-	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Chlorotoluene,o-	µg/kg							
Chlorotoluene,p-	µg/kg							
Dibromomethane	µg/kg	<6.2 U <sub>r</sub>			<5.9 U <sub>r</sub>		<5.9 U <sub>r</sub>	
Dichlorobenzene,1,2-	µg/kg				<390 U <sub>j</sub>			

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 41 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316
	Sample ID	1634627	1634628	1634629	1634629	1634630	1634630	1634631
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:35	10:40	10:45	10:45	10:50	10:50	11:00
	Sample Depth	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	QUAN	LEA
	Lab. Number	A7F130102007	35-3476-047	35-3478-049	A7F130102009	35-3479-050	A7F130102010	35-3480-051
Constituent	Units							
Dichlorobenzene, 1,3-	µg/kg				<390 U j			
Dichlorobenzene, 1,4-	µg/kg				<390 U j			
Dichlorobromomethane	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichlorodifluoromethane	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichloroethane, 1,1-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichloroethane, 1,2-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichloroethylene, 1,1-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichloroethylene, 1,2-cis-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichloroethylene, 1,2-trans-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichloropropane, 1,2-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichloropropylene, 1,3-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Dichloropropylene, 1,3-cis-	µg/kg							
Dichloropropylene, 1,3-trans-	µg/kg							
Dioxane, 1,4-	µg/kg	<190 U r			<180 U r		<180 U r	
Ethyl Methacrylate	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Ethylbenzene	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Ethylbenzene (screening)	µg/kg		<23	<23		<21		<19
Ethylene Dibromide	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Hexanone, 2-	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Iodomethane	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Isobutyl Alcohol	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Methacrylonitrile	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Methyl Bromide	µg/kg	<12 U r			<12 U r		<12 U r	
Methyl Chloride	µg/kg	<12 U r			<12 U r		<12 U r	
Methyl Ethyl Ketone	µg/kg	<120 U r			<120 U r		<120 U r	
Methyl Methacrylate	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	
Methyl-2-pentanone, 4-	µg/kg	<12 U r			<12 U r		<12 U r	
Methyl-tert-butyl Ether	µg/kg	<6.2 U r			<5.9 U r		<5.9 U r	

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 42 of 49

	Location ID	NK-SB-315	NK-SB-315	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316	NK-SB-316
	Sample ID	1634627	1634628	1634629	1634629	1634630	1634630	1634631
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997
	Sample Time	10:35	10:40	10:45	10:45	10:50	10:50	11:00
	Sample Depth	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	QUAN	LEA
	Lab. Number	A7F130102007	35-3476-047	35-3478-049	A7F130102009	35-3479-050	A7F130102010	35-3480-051
Constituent	Units							
Methylene Chloride	µg/kg	2.8 Jj			2.8 Jj		<5.9 Ur	
Pentachlorobenzene	µg/kg				<390 Uj			
Pentachloroethane	µg/kg				<390 Uj			
Pentachloronitrobenzene	µg/kg				<390 Uj			
Propionitrile	µg/kg	<25 Ur			<23 Ur		<24 Ur	
Styrene	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Tetrachloroethane, 1,1,1,2-	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Tetrachloroethane, 1,1,2,2-	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Tetrachloroethylene	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Tetrachloroethylene (screening)	µg/kg		<24	<24		<22		<20
Toluene	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Toluene (screening)	µg/kg		<22	<22		<20		<18
Trichloroethane, 1,1,1-	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Trichloroethane, 1,1,1- (screening)	µg/kg		<382	<382		<348		<320
Trichloroethane, 1,1,2-	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Trichloroethylene	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Trichloroethylene (screening)	µg/kg		<37	<37		<34		<31
Trichloromonofluoromethane	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Trichloropropane, 1,2,3-	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Vinyl Acetate	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Vinyl Chloride	µg/kg	<12 Ur			<12 Ur		<12 Ur	
Xylene, o- (screening)	µg/kg		<31	<31		<28		<26
Xylenes (Total)	µg/kg	<6.2 Ur			<5.9 Ur		<5.9 Ur	
Xylenes, m- & p- (screening)	µg/kg		<16	<16		<15		<14

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 43 of 49

	Location ID	NK-SB-316	NK-SB-316	NK-SB-316				
	Sample ID	1634632	1634633	1634634				
	Sample Date	06/06/1997	06/06/1997	06/06/1997				
	Sample Time	11:05	11:15	11:20				
	Sample Depth	6' - 8'	8' - 10'	10' - 12'				
	Laboratory	LEA	LEA	LEA				
	Lab. Number	35-3481-052	35-3482-053	35-3483-054				
Constituent	Units							
Date Organics Analyzed	-	06/09/1997	06/09/1997	06/09/1997				
Date Physical Analysed	-							
Date Semi-volatile Organics Analyzed	-							
Dinoseb	µg/kg							
Acetylaminofluorene, 2-	µg/kg							
Aramite	µg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg							
Dimethoate	µg/kg							
Disulfoton	µg/kg							
Famphur	µg/kg							
Phorate	µg/kg							
Total Petroleum Hydrocarbons	mg/kg							
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Acetophenone	µg/kg							
Aminobiphenyl, 4-	µg/kg							
Aniline	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Benzoic Acid	µg/kg							
Benzyl Alcohol	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 44 of 49

	Location ID	NK-SB-316	NK-SB-316	NK-SB-316				
	Sample ID	1634632	1634633	1634634				
	Sample Date	06/06/1997	06/06/1997	06/06/1997				
	Sample Time	11:05	11:15	11:20				
	Sample Depth	6' - 8'	8' - 10'	10' - 12'				
	Laboratory	LEA	LEA	LEA				
	Lab. Number	35-3481-052	35-3482-053	35-3483-054				
Constituent	Units							
Bis(2-ethylhexyl) Phthalate	µg/kg							
Bromophenyl Phenyl Ether,4-	µg/kg							
Butyl Benzyl Phthalate	µg/kg							
Carbazole	µg/kg							
Chloro-m-cresol,p-	µg/kg							
Chloroaniline,4-	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Cresol,2-	µg/kg							
Cresol,3-	µg/kg							
Cresol,4-	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dibenzofuran	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylaminoazobenzene,4-	µg/kg							
Dimethylbenzidine,3,3'-	µg/kg							
Dimethylbenzo[a]anthracene,7,12-	µg/kg							
Dimethylphenethylamine,alpha,alpha-	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 45 of 49

	Location ID	NK-SB-316	NK-SB-316	NK-SB-316				
	Sample ID	1634632	1634633	1634634				
	Sample Date	06/06/1997	06/06/1997	06/06/1997				
	Sample Time	11:05	11:15	11:20				
	Sample Depth	6' - 8'	8' - 10'	10' - 12'				
	Laboratory	LEA	LEA	LEA				
	Lab. Number	35-3481-052	35-3482-053	35-3483-054				
Constituent	Units							
Dinitrobenzene, 1,3-	µg/kg							
Dinitrophenol, 2,4-	µg/kg							
Dinitrotoluene, 2,4-	µg/kg							
Dinitrotoluene, 2,6-	µg/kg							
Diphenylamine	µg/kg							
Diphenylhydrazine, 1,2-	µg/kg							
Ethyl Methanesulfonate	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Hexachlorophene	µg/kg							
Hexachloropropylene	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
Isosafrole	µg/kg							
Methapyrilene	µg/kg							
Methyl Methanesulfonate	µg/kg							
Methylcholanthrene, 3-	µg/kg							
Methylnaphthalene, 2-	µg/kg							
N-nitroso-di-n-butylamine	µg/kg							
N-nitroso-n-propylamine	µg/kg							
N-nitrosodiethylamine	µg/kg							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
N-nitrosomethylethylamine	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 46 of 49

	Location ID	NK-SB-316	NK-SB-316	NK-SB-316			
	Sample ID	1634632	1634633	1634634			
	Sample Date	06/06/1997	06/06/1997	06/06/1997			
	Sample Time	11:05	11:15	11:20			
	Sample Depth	6' - 8'	8' - 10'	10' - 12'			
	Laboratory	LEA	LEA	LEA			
	Lab. Number	35-3481-052	35-3482-053	35-3483-054			
Constituent	Units						
N-nitrosomorpholine	µg/kg						
N-nitrosopiperidine	µg/kg						
Naphthalene	µg/kg						
Naphthoquinone,1,4-	µg/kg						
Naphthylamine,alpha-	µg/kg						
Naphthylamine,beta-	µg/kg						
Nitro-o-toluidine,5-	µg/kg						
Nitroaniline,2-	µg/kg						
Nitroaniline,3-	µg/kg						
Nitroaniline,4-	µg/kg						
Nitrobenzene	µg/kg						
Nitrophenol,2-	µg/kg						
Nitrophenol,4-	µg/kg						
Nitroquinoline-1-oxide,4-	µg/kg						
Nitrosopyrrolidine,n-	µg/kg						
Pentachlorophenol	µg/kg						
Phenacetin	µg/kg						
Phenanthrene	µg/kg						
Phenol	µg/kg						
Phenylenediamine,1,4-	µg/kg						
Picoline,2-	µg/kg						
Pronamide	µg/kg						
Propane),2,2'-oxybis(1-chloro-	µg/kg						
Propane),2,2'-oxybis(2-chloro-	µg/kg						
Pyrene	µg/kg						
Pyridine	µg/kg						
Safole	µg/kg						
Tetrachlorobenzene,1,2,4,5-	µg/kg						

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 47 of 49

	Location ID	NK-SB-316	NK-SB-316	NK-SB-316				
	Sample ID	1634632	1634633	1634634				
	Sample Date	06/06/1997	06/06/1997	06/06/1997				
	Sample Time	11:05	11:15	11:20				
	Sample Depth	6' - 8'	8' - 10'	10' - 12'				
	Laboratory	LEA	LEA	LEA				
	Lab. Number	35-3481-052	35-3482-053	35-3483-054				
Constituent	Units							
Tetrachlorophenol,2,3,4,6-	µg/kg							
Toluidine,o-	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,5-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Triethyl Phosphorothioate,o,o,o-	µg/kg							
Trinitrobenzene,1,3,5-	µg/kg							
Acetone	µg/kg							
Acetonitrile	µg/kg							
Acrolein	µg/kg							
Acrylonitrile	µg/kg							
Allyl Chloride	µg/kg							
Benzene	µg/kg							
Benzene (screening)	µg/kg	<15	<16	<12				
Bromobenzene	µg/kg							
Bromoform	µg/kg							
Carbon Disulfide	µg/kg							
Carbon Tetrachloride	µg/kg							
Chlorobenzene	µg/kg							
Chlorodibromomethane	µg/kg							
Chloroethane	µg/kg							
Chloroethyl Vinyl Ether,2-	µg/kg							
Chloroform	µg/kg							
Chloroprene,beta-	µg/kg							
Chlorotoluene,o-	µg/kg							
Chlorotoluene,p-	µg/kg							
Dibromomethane	µg/kg							
Dichlorobenzene,1,2-	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 48 of 49

	Location ID	NK-SB-316	NK-SB-316	NK-SB-316				
	Sample ID	1634632	1634633	1634634				
	Sample Date	06/06/1997	06/06/1997	06/06/1997				
	Sample Time	11:05	11:15	11:20				
	Sample Depth	6' - 8'	8' - 10'	10' - 12'				
	Laboratory	LEA	LEA	LEA				
	Lab. Number	35-3481-052	35-3482-053	35-3483-054				
Constituent	Units							
Dichlorobenzene, 1,3-	µg/kg							
Dichlorobenzene, 1,4-	µg/kg							
Dichlorobromomethane	µg/kg							
Dichlorodifluoromethane	µg/kg							
Dichloroethane, 1,1-	µg/kg							
Dichloroethane, 1,2-	µg/kg							
Dichloroethylene, 1,1-	µg/kg							
Dichloroethylene, 1,2-cis-	µg/kg							
Dichloroethylene, 1,2-trans-	µg/kg							
Dichloropropane, 1,2-	µg/kg							
Dichloropropylene, 1,3-	µg/kg							
Dichloropropylene, 1,3-cis-	µg/kg							
Dichloropropylene, 1,3-trans-	µg/kg							
Dioxane, 1,4-	µg/kg							
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg							
Ethylbenzene (screening)	µg/kg	<22	<23	<17				
Ethylene Dibromide	µg/kg							
Hexanone, 2-	µg/kg							
Iodomethane	µg/kg							
Isobutyl Alcohol	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg							
Methyl Chloride	µg/kg							
Methyl Ethyl Ketone	µg/kg							
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg							
Methyl-tert-butyl Ether	µg/kg							

Notes: 1. Printed on 07/09/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 49 of 49

	Location ID	NK-SB-316	NK-SB-316	NK-SB-316				
	Sample ID	1634632	1634633	1634634				
	Sample Date	06/06/1997	06/06/1997	06/06/1997				
	Sample Time	11:05	11:15	11:20				
	Sample Depth	6' - 8'	8' - 10'	10' - 12'				
	Laboratory	LEA	LEA	LEA				
	Lab. Number	35-3481-052	35-3482-053	35-3483-054				
Constituent	Units							
Methylene Chloride	µg/kg							
Pentachlorobenzene	µg/kg							
Pentachloroethane	µg/kg							
Pentachloronitrobenzene	µg/kg							
Propionitrile	µg/kg							
Styrene	µg/kg							
Tetrachloroethane, 1,1,1,2-	µg/kg							
Tetrachloroethane, 1,1,2,2-	µg/kg							
Tetrachloroethylene	µg/kg							
Tetrachloroethylene (screening)	µg/kg	<23	<24	<18				
Toluene	µg/kg							
Toluene (screening)	µg/kg	<21	<23	<16				
Trichloroethane, 1,1,1-	µg/kg							
Trichloroethane, 1,1,1- (screening)	µg/kg	<368	<390	<283				
Trichloroethane, 1,1,2-	µg/kg							
Trichloroethylene	µg/kg							
Trichloroethylene (screening)	µg/kg	<36	<38	<27				
Trichloromonofluoromethane	µg/kg							
Trichloropropane, 1,2,3-	µg/kg							
Vinyl Acetate	µg/kg							
Vinyl Chloride	µg/kg							
Xylene, o- (screening)	µg/kg	<30	<32	<23				
Xylenes (Total)	µg/kg							
Xylenes, m- & p- (screening)	µg/kg	<16	<17	<12				

Notes: 1. Printed on 07/09/98

**LEA**

***DRAFT***

Page 1 of 1

[illegible]

Notes: 1. Only Detects Shown  
2. Printed on 07/09/98

LEA

Table 5

DRAFT

**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER  
P&W East Hartford: X-430 Aboveground Storage Tank**

Page 1 of 6

	Location ID	NK-SB-315	NK-SB-316	NK-SB-317	NK-SB-318	NK-SB-318		
	Sample ID	1634613	1634610	1634611	1634612	1634612		
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997		
	Sample Time	13:40	11:20	12:40	13:15	13:15		
	Sample Depth	5' - 8'	5' - 8'	5' - 8'	5' - 8'	5' - 8'		
	Laboratory	QUAN	QUAN	QUAN	QUAN	QUAN		
	Lab. Number	A7F090112004	A7F090112001	A7F090112002	27F090112003	A7F090112003		
Constituent	Units							
Date Organics Analyzed	-	06/19/1997	06/19/1997	06/19/1997		06/19/1997		
Date Physical Analysed	-	06/27/1997	06/27/1997	06/27/1997		06/27/1997		
Date Semi-volatile Organics Analyzed	-	06/19/1997	06/19/1997	06/19/1997	06/25/1997	06/19/1997		
Dinoseb	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Acetylaminofluorene,2-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Aramite	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dibromo-3-chloropropane,1,2-	µg/L	<2.0 U	<2.0 U	<2.0 U		<2.0 U		
Dimethoate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Disulfoton	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Famphur	µg/L	<20 U J	<20 U J	<20 U J	<20 U J	<20 U J		
Phorate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Total Petroleum Hydrocarbons	mg/L	<1.0 U	<1.0 U	1.1		<1.0 U		
Acenaphthene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Acenaphthylene	µg/L	<0.80 U	<0.80 U	<0.80 U	<0.80 U J	<0.80 U		
Acetophenone	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Aminobiphenyl,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Aniline	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Anthracene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Benzo[a]anthracene	µg/L	<0.80 U	<0.80 U	<0.80 U	<0.80 U J	<0.80 U		
Benzo[a]pyrene	µg/L	<0.70 U	<0.70 U	<0.70 U	<0.70 U J	<0.70 U		
Benzo[b]fluoranthene	µg/L	<0.80 U	<0.80 U	<0.80 U	<0.80 U J	<0.80 U		
Benzo[ghi]perylene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Benzo[k]fluoranthene	µg/L	<0.80 U	<0.80 U	<0.80 U	<0.80 U J	<0.80 U		
Benzyl Alcohol	µg/L	<20 U	<20 U	<20 U	<20 U J	<20 U		
Bis(2-chloroethoxy)methane	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Bis(2-chloroethyl) Ether	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Bis(2-ethylhexyl) Phthalate	µg/L	<7.0 U	<7.0 U	<7.0 U	11 J	<7.0 U		
Bromophenyl Phenyl Ether,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		

Notes: 1. Printed on 07/09/98

LEA

**Table 5**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 2 of 6

	Location ID	NK-SB-315	NK-SB-316	NK-SB-317	NK-SB-318	NK-SB-318		
	Sample ID	1634613	1634610	1634611	1634612	1634612		
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997		
	Sample Time	13:40	11:20	12:40	13:15	13:15		
	Sample Depth	5' - 8'	5' - 8'	5' - 8'	5' - 8'	5' - 8'		
	Laboratory	QUAN	QUAN	QUAN	QUAN	QUAN		
	Lab. Number	A7F090112004	A7F090112001	A7F090112002	27F090112003	A7F090112003		
Constituent	Units							
Butyl Benzyl Phthalate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Carbazole	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Chloro-m-cresol,p-	µg/L	<20 U	<20 U	<20 U	<20 U J	<20 U		
Chloroaniline,4-	µg/L	<20 U	<20 U	<20 U	<20 U J	<20 U		
Chloronaphthalene,2-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Chlorophenol,2-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Chlorophenyl Phenyl Ether,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Chrysene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Cresol,2-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Cresol,3-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Cresol,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Di-n-butyl Phthalate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Di-n-octyl Phthalate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dibenzo[a,h]anthracene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dibenzofuran	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dichloro-2-butylene,1,4-trans-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dichlorobenzidine,3,3'-	µg/L	<20 U	<20 U	<20 U	<20 U J	<20 U		
Dichlorophenol,2,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Diethyl Phthalate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dimethyl Phthalate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dimethylaminoazobenzene,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dimethylbenzidine,3,3'-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dimethylbenzo[a]anthracene,7,12-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dimethylphenethylamine,alpha,alpha-	µg/L	<20 U J	<20 U J	<20 U J	<20 U J	<20 U J		
Dimethylphenol,2,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dinitro-o-cresol,4,6-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Dinitrobenzene,1,3-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dinitrophenol,2,4-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		

Notes: 1. Printed on 07/09/98

**LEA**

**Table 5**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 3 of 6

	Location ID	NK-SB-315	NK-SB-316	NK-SB-317	NK-SB-318	NK-SB-318		
	Sample ID	1634613	1634610	1634611	1634612	1634612		
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997		
	Sample Time	13:40	11:20	12:40	13:15	13:15		
	Sample Depth	5' - 8'	5' - 8'	5' - 8'	5' - 8'	5' - 8'		
	Laboratory	QUAN	QUAN	QUAN	QUAN	QUAN		
	Lab. Number	A7F090112004	A7F090112001	A7F090112002	27F090112003	A7F090112003		
Constituent	Units							
Dinitrotoluene,2,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dinitrotoluene,2,6-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Diphenylamine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Ethyl Methanesulfonate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Fluoranthene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Fluorene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Hexachlorobenzene	µg/L	<0.80 U	<0.80 U	<0.80 U	<0.80 U J	<0.80 U		
Hexachlorobutadiene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Hexachlorocyclopentadiene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Hexachloroethane	µg/L	<3.0 U	<3.0 U	<3.0 U	<3.0 U J	<3.0 U		
Hexachlorophene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Hexachloropropylene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Indeno(1,2,3-cd)pyrene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Isophorone	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Isosafrole	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Methapyrilene	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Methyl Methanesulfonate	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Methylcholanthrene,3-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Methylnaphthalene,2-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
N-nitroso-di-n-butylamine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
N-nitroso-n-propylamine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
N-nitrosodiethylamine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
N-nitrosodimethylamine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
N-nitrosodiphenylamine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
N-nitrosomethylethylamine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
N-nitrosomorpholine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
N-nitrosopiperidine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Naphthalene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		

Notes: 1. Printed on 07/09/98

**LEA**

**Table 5**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 4 of 6

	Location ID	NK-SB-315	NK-SB-316	NK-SB-317	NK-SB-318	NK-SB-318		
	Sample ID	1634613	1634610	1634611	1634612	1634612		
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997		
	Sample Time	13:40	11:20	12:40	13:15	13:15		
	Sample Depth	5' - 8'	5' - 8'	5' - 8'	5' - 8'	5' - 8'		
	Laboratory	QUAN	QUAN	QUAN	QUAN	QUAN		
	Lab. Number	A7F090112004	A7F090112001	A7F090112002	27F090112003	A7F090112003		
Constituent	Units							
Naphthoquinone,1,4-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Naphthylamine,alpha-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Naphthylamine,beta-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Nitro-o-toluidine,5-	µg/L	<10 U J	<10 U J	<10 U J	<10 U J	<10 U J		
Nitroaniline,2-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Nitroaniline,3-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Nitroaniline,4-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Nitrobenzene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Nitrophenol,2-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Nitrophenol,4-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Nitroquinoline-1-oxide,4-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Nitrosopyrrolidine,n-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Pentachlorophenol	µg/L	<2.0 U	<2.0 U	<2.0 U	<2.0 U J	<2.0 U		
Phenacetin	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Phenanthrene	µg/L	<0.80 U	<0.80 U	<0.80 U	<0.80 U J	<0.80 U		
Phenol	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Phenylenediamine,1,4-	µg/L	<50 U	<50 U	<50 U	<50 U J	<50 U		
Picoline,2-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Pronamide	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Propane),2,2'-oxybis(1-chloro-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Pyrene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Pyridine	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Saffrole	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Tetrachlorobenzene,1,2,4,5-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Tetrachlorophenol,2,3,4,6-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Toluidine,o-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Trichlorobenzene,1,2,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Trichlorophenol,2,4,5-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		

Notes: 1. Printed on 07/09/98

**LEA**

Table 5

DRAFT

**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER  
P&W East Hartford: X-430 Aboveground Storage Tank**

Page 5 of 6

	Location ID	NK-SB-315	NK-SB-316	NK-SB-317	NK-SB-318	NK-SB-318		
	Sample ID	1634613	1634610	1634611	1634612	1634612		
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997		
	Sample Time	13:40	11:20	12:40	13:15	13:15		
	Sample Depth	5' - 8'	5' - 8'	5' - 8'	5' - 8'	5' - 8'		
	Laboratory	QUAN	QUAN	QUAN	QUAN	QUAN		
	Lab. Number	A7F090112004	A7F090112001	A7F090112002	27F090112003	A7F090112003		
Constituent	Units							
Trichlorophenol,2,4,6-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Triethyl Phosphorothioate,o,o,o-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Acetone	µg/L	25 J						
Acrolein	µg/L			<20 U				
Allyl Chloride	µg/L	<2.0 U	<2.0 U	<2.0 U		<2.0 U		
Benzene	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Bromoform	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Carbon Disulfide	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Carbon Tetrachloride	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Chlorobenzene	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Chlorodibromomethane	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Chloroethane	µg/L	<2.0 U	<2.0 U	<2.0 U		<2.0 U		
Chloroform	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Chloroprene,beta-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dibromomethane	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dichlorobenzene,1,2-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dichlorobenzene,1,3-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dichlorobenzene,1,4-	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Dichlorobromomethane	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dichlorodifluoromethane	µg/L	<2.0 U	<2.0 U	<2.0 U		<2.0 U		
Dichloroethane,1,1-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dichloroethane,1,2-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dichloroethylene,1,1-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dichloroethylene,1,2-trans-	µg/L	<0.50 U	<0.50 U	<0.50 U		<0.50 U		
Dichloropropane,1,2-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dichloropropylene,1,3-cis-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Dichloropropylene,1,3-trans-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Ethyl Methacrylate	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		

Notes: 1. Printed on 07/09/98

LEA



**Table 5**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**P&W East Hartford: X-430 Aboveground Storage Tank**

**DRAFT**

Page 6 of 6

	Location ID	NK-SB-315	NK-SB-316	NK-SB-317	NK-SB-318	NK-SB-318		
	Sample ID	1634613	1634610	1634611	1634612	1634612		
	Sample Date	06/06/1997	06/06/1997	06/06/1997	06/06/1997	06/06/1997		
	Sample Time	13:40	11:20	12:40	13:15	13:15		
	Sample Depth	5' - 8'	5' - 8'	5' - 8'	5' - 8'	5' - 8'		
	Laboratory	QUAN	QUAN	QUAN	QUAN	QUAN		
	Lab. Number	A7F090112004	A7F090112001	A7F090112002	27F090112003	A7F090112003		
Constituent	Units							
Ethylbenzene	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Ethylene Dibromide	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Hexanone, 2-	µg/L	<10 U	<10 U	<10 U		<10 U		
Iodomethane	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Methacrylonitrile	µg/L	<10 U		<10 U		<10 U		
Methyl Bromide	µg/L	<2.0 U J	<2.0 U J	<2.0 U J		<2.0 U J		
Methyl Chloride	µg/L	<2.0 U	<2.0 U	<2.0 U		<2.0 U		
Methyl Methacrylate	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Methyl-2-pentanone, 4-	µg/L	<10 U	<10 U	<10 U		<10 U		
Methylene Chloride	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Pentachlorobenzene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Pentachloroethane	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Pentachloronitrobenzene	µg/L	<10 U	<10 U	<10 U	<10 U J	<10 U		
Styrene	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Tetrachloroethane, 1,1,1,2-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Tetrachloroethane, 1,1,2,2-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Tetrachloroethylene	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Toluene	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Trichloroethane, 1,1,1-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Trichloroethane, 1,1,2-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Trichloroethylene	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Trichloromonofluoromethane	µg/L	<2.0 U	<2.0 U	<2.0 U		<2.0 U		
Trichloropropane, 1,2,3-	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		
Vinyl Acetate	µg/L	<2.0 U	<2.0 U	<2.0 U		<2.0 U		
Vinyl Chloride	µg/L	<2.0 U	<2.0 U	<2.0 U		<2.0 U		
Xylenes (Total)	µg/L	<1.0 U	<1.0 U	<1.0 U		<1.0 U		

Notes: 1. Printed on 07/09/98

**LEA**

***DRAFT***

Page 1 of 1

[illegible]

Notes: 1. Only Exceedances Shown  
2. Printed on 07/09/98

LEA

***DRAFT***

Page 1 of 1

[illegible]

Notes: 1. Only Exceedances Shown  
2. Printed on 07/09/98

LEA

**DRAFT**

Page 1 of 1

[illegible]

Notes: 1. Only Exceedances Shown  
2. Printed on 07/09/98

LEA

## **DRAWINGS**

**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**                      ☐ **Other (Provide  
Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 1: SOIL INVESTIGATIONS X-430 AREA  
ABOVEGROUND STORAGE TANK LOCATION &  
CONSTITUENTS DETECTED MAP**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

\_\_\_\_\_  
\_\_\_\_\_

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***

**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**                      ☐ **Other (Provide  
Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 2: GROUNDWATER INVESTIGATIONS X-430  
AREA ABOVEGROUND STORAGE TANK LOCATION &  
CONSTITUENTS DETECTED MAP**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

\_\_\_\_\_  
\_\_\_\_\_

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***

---

**D-R-A-F-T**

**SUMMARY  
SITE INVESTIGATION AND REMEDIATION REPORT  
AIRPORT/KLONDIKE AREA  
AT  
PRATT & WHITNEY  
EAST HARTFORD, CONNECTICUT  
EPA ID No. CTD990672081**

**Prepared for:**

**PRATT & WHITNEY  
A UNITED TECHNOLOGIES COMPANY  
400 Main Street  
East Hartford, Connecticut 06108**

**Prepared by:**

**LOUREIRO ENGINEERING ASSOCIATES, P.C.  
100 Northwest Drive  
Plainville, Connecticut 06062**

**LEA Comm. No. 68V8124**

---



---

## Table of Contents

	<b>Page</b>
<b>1. INTRODUCTION</b>	<b>1-1</b>
1.1 Background	1-2
1.2 Goals and Objectives	1-2
1.3 Report Organization	1-3
1.3.1 Main Document Sections and Appendices	1-3
1.3.2 Tables, Figures, and Drawings	1-4
1.3.3 Unit-Specific Technical Memoranda	1-4
1.3.4 Activity Technical Memoranda	1-5

## **TABLES**

Table 1      Environmental Units

## **FIGURES**

Figure 1      USGS Topographic Map

Figure 2      Site Plan

## **DRAWINGS**

Drawing 1    Site Location Map & Environmental Units

## **UNIT-SPECIFIC TECHNICAL MEMORANDA**

### **North Airport:**

The Rentschler Airport Area

### **North Klondike:**

Explosives Storage Area

M.E.R.L. Area

Undeveloped Land Area - North Klondike

X-312 / X-314 Area

X-401 Area

X-407 Area

X-410 Area

X-415 Area

X-430 Area

### **South Klondike:**

Cryogenics Area

Tie-Down Area

Undeveloped Land Area - South Klondike

X-307 Area

## **TECHNICAL MEMORANDA**

Technical Memorandum 3    Groundwater Sampling and Quality

## **1. INTRODUCTION**

Loureiro Engineering Associates, P.C. (LEA) was retained by Pratt & Whitney (P&W) to conduct a voluntary subsurface investigation at a portion of the P&W facility located at 400 Main Street (Main Street facility) in the Town of East Hartford, Connecticut. The portion of the Main Street facility addressed in this summary report is known as the Airport/Klondike Area (hereinafter referred to as the Site). The subsurface investigation at the Site was undertaken on a voluntary basis pursuant to Section 22a-133x(b) of the Connecticut General Statutes (CGS). It should be noted that Section 22a-133x of the CGS was recently codified and was formerly known as Section 3 of Public Act (PA) 95-183.

The activities at the Main Street facility are also subject to a Voluntary Corrective Action Program (VCAP). On July 17, 1996, P&W and the United States Environmental Protection Agency, Region 1 (EPA-New England) signed a Memorandum of Understanding (MOU) that outlines the principle components of the VCAP. P&W's principal objective, as discussed in the MOU, is to have initiated stabilization activities at the Main Street facility on or before December 31, 1999. With P&W's desire to transfer the Airport/Klondike portion of the Main Street facility in the near future, the Airport/Klondike Area is being taken to final remediation at this time.

Pursuant to Section 22a-133x(a) of the CGS (formerly Section 3(a) of PA 95-183), P&W is going to submit an Environmental Condition Assessment Form (ECAAF) to the State of Connecticut Department of Environmental Protection (DEP). P&W is completing and submitting the ECAAF in support of the intention to perform the investigation and, as necessary, the remediation of the Site under the direction of a Licensed Environmental Professional (LEP) pursuant to Section 22a-133x(b) of the CGS.

Preliminary discussions held with the DEP have indicated that the voluntary investigation and remediation of the Site could be conducted pursuant to Section 22a-133x(b) of the CGS. The provisions of Section 22a-133x(b) allow for the investigation and remediation of a site under the direction of an environmental professional licensed pursuant to Section 22a-133v(e) of the CGS. It should be noted that Section 22a-133v was recently codified and was formerly known as Section 4(e) of PA 95-183. This report provides documentation of the site characterization investigations that have been performed to characterize the nature and delineate the extent of contamination identified on the Site, provides documentation of the remediation activities that

have been conducted, and provides relevant information necessary to verify that the investigation and remediation have been performed in accordance with prevailing standards and guidelines.

## **1.1 Background**

The P&W Main Street facility is located on over 960 acres with over 6.5 million square feet of floor area for manufacturing, research, office space, and space for related activities and support services. The Main Street facility has been used for the manufacture of aircraft engines and aircraft engine components since December 1929. Operations at the facility include (or have included in the past) metal parts machining, vapor degreasing, chemical etching, cleaning, electroplating, painting, assembly and testing, and research operations.

To the east of the main complex of the Main Street facility lies the Airport/Klondike Area consisting of the Rentschler Field and an area known as the Klondike. The Airport/Klondike Area was used for experimental test operations as well as ancillary support operations for the main complex. This approximately 600 acre Airport/Klondike Area is the Site as addressed in this report.

## **1.2 Goals and Objectives**

The primary objective of the subsurface investigation was to determine whether or not there has been a release(s) to soil or groundwater due to activities conducted at the Site, and if a release is identified, to determine if remediation is required. Therefore, the subsurface investigations were conducted in a manner that would support evaluation of the need for remediation in accordance with the requirements of the Connecticut Remediation Standard Regulation (Sections 22a-133k-1 through 22a-133k-3) of the Regulations of Connecticut State Agencies (RCSA).

The subsurface investigation was designed with the goal of providing sufficient information to characterize the nature, and delineate the extent of contamination detected on the Site. To achieve the stated goal and objectives, the subsurface investigation was designed to include both environmental setting and contaminant delineation investigations. The objective of the environmental setting activities was to develop a site-wide understanding of environmental conditions in soils and groundwater, particularly in the context of how those conditions might affect the fate and transport of potential contaminants. The environmental setting investigations were designed to characterize the unconsolidated materials in terms of physical characteristics to define the stratigraphy and soil properties of both the saturated and unsaturated zones across the Site.

The objective of the contaminant delineation investigation was to define the nature, and delineate the extent of soil and groundwater contamination at the Site. The contaminant delineation investigation was designed to include both initial and focused soil sampling activities and site-wide groundwater sampling activities. The initial activities were designed to quickly evaluate large portions of the Site and included geophysical surveying consisting of both time-domain electromagnetic induction (TDEM) and magnetometry and soil vapor surveying. The results of the initial activities were used to direct the placement of soil borings and test-pit excavations to be conducted in the focused soil sampling activities in select areas at the Site. Groundwater contamination is evaluated from a site-wide perspective due to the nature of groundwater movement and contaminant transport.

### **1.3 Report Organization**

This summary report documents the investigation and remediation activities completed for the Airport/Klondike Area between June 1996 and June 1998, interprets the data collected, and provides conclusions derived from this data.

#### **1.3.1 Main Document Sections and Appendices**

In presenting the investigation and remediation activities completed for the Airport/Klondike Area, section discussions are followed by supporting tables, figures, and drawings. The following is a general description of the contents of each of the following sections of the report.

- Section 2 includes a summary facility description and includes pertinent background information. Section 2 includes information regarding facility operations and former investigations conducted at the Site.
- Section 3 describes the methodologies for the field investigation activities performed during the Site characterization. These activities included the performance of soil vapor and geophysical surveys, soil boring installation, monitoring well installation, the performance of test-pit excavations, and soil and groundwater sampling.
- Section 4 describes the methodologies for the management, documentation, and presentation of the data collected as part of the investigation and remediation activities.
- Section 5 presents the results of the environmental setting investigations conducted at the Site. Section 5 details the environmental setting of the Site and includes

discussions of the site-specific geologic and hydrogeologic conditions encountered and discussions of regional geologic and hydrogeologic conditions as derived from available published information.

- Section 6 presents a site-wide overview of the soil and groundwater analytical results obtained during the contaminant delineation investigations.
- Section 7 provides an evaluation of the soil and groundwater data against the applicable numeric criteria established pursuant to the Remediation Standard Regulation (RSR).
- Section 8 presents the remediation activities that were conducted at the site to satisfy the RSR.
- Section 9 presents a summary of the findings of the investigation and remediation activities performed to date and conclusions.

### **1.3.2 Tables, Figures, and Drawings**

To maintain the readability of this report and to prevent the numerous tables and figures from interfering with the flow of the text, all of the tables, figures, and drawings have been placed after the final text sections of the main body of the report. Table and figure groupings are marked with dividers so readers can easily refer to them when necessary. Supporting documents, including daily field reports, analytical data, boring logs, well completion logs, and geophysical investigation reports can be provided under separate cover.

### **1.3.3 Unit-Specific Technical Memoranda**

Technical Memoranda (TMs) that present the results of soil sampling and analysis in the vicinity of specific Environmental Units that were investigated as part of the Site investigation activities have been prepared to aid in the identification and evaluation of sources or potential sources of contamination at the Airport/Klondike Area of the P&W Main Street facility. These Unit-Specific Technical Memoranda (USTMs) include pertinent background information for each of the Environmental Units for which a subsurface investigation was conducted. USTMs were also prepared for those units that did not warrant a subsurface investigation. As applicable, each USTM includes the rationale for conducting any investigation activities at that location, an outline of any investigation that was performed, analytical results from the investigation, and any conclusions based on the data collected.

In cases where remediation activities were conducted, each USTM also includes the rationale for conducting any remediation activities at that location, an outline of any remediation activities that were performed, the analytical results upon completion of the remediation activities, and conclusions based on the data collected.

#### **1.3.4 Activity Technical Memoranda**

Technical Memoranda describing investigation or remediation activities that were undertaken as part of the Site investigation and remediation have been included as part of the report to document those activities in greater detail than would be feasible in the main body of the report. In all, four TMs have been prepared. The titles are noted below:

- TM 1, *Monitoring Well Installation and Development and Soil Sampling*
- TM 2, *Water-level Measurements and Site Survey Data*
- TM 3, *Groundwater Sampling and Quality*
- TM 4, *Background Soil Data*

These TMs have been presented in several separate volumes following the main body of the report and the volumes containing the USTMs.

# TABLES



**TABLE 1  
ENVIRONMENTAL UNITS**

Airport/Klondike Area  
Pratt & Whitney Main Street Facility

	AREA USTM	INDIVIDUAL USTM	DATE SUBMITTED	DATE REVIEWED	DATE REVISED
<b>NORTH AIRPORT AREA</b>					
Rentschler Field	X		3/31/98		
Runway Area	O				
Former Army Barracks Septic Systems		X			
Silver Lane Pickle Company					
Underground Storage Tanks		X			
Soil Piles		X			
<b>NORTH KLONDIKE AREA</b>					
X-401 Area	X		4/2/98		
X-401 Test Stand	O				
X-402 Test Stand	O				
X-403 Test Stand	O				
Equipment Shed	O				
Pavilion	O				
Locker Room	O				
Fire Training Area C		X			
X-401 Drywells		X			
X-401 Locker Room Septic System		X			
X-410 Area	X		3/31/98		
X-442 Storage Room	O				
X-196 Control Room	O				
X-410 Test Stand	O				
X-411 Test Stand	O				
X-412 Test Stand	O				
X-411 Control Room	O				
X-411 Compressor Room	O				
Maintenance and Storage Building	O				
X-410 Drain Pipe		X			
Maintenance and Storage Septic System		X			
X-410 Oil Rack		X			
X-415 Area	X		4/3/98		
X-415 Combustion Lab	O				
X-416 Test Stand	O				
X-417 Test Stand	O				
X-419 and X-420 Test Stands	O				
X-426 and X-427 Test Stands	O				
X-449 Test Stand	O				
X-450 Test Stand	O				
X-451 Test Stand	O				
Infra-Red Lab X-450	O				
X-415 Septic System and Drywell		X			
X-415 Boiler Room AST		X			
M.E.R.L. Area	X		3/31/98		
M.E.R.L. Explosives Forming	O				
Control Room	O				
Storage Building	O				
Undesignated Building	O				
Fire Training Area D		X			
MERL Drywell		X			
Explosives Storage Area	X		4/2/98		
Outside Storage Area	O				
Fill Area		X			
Underground Storage Tank		X			
Explosives Storage Building		X			
Outside Chemical Storage Shed		X			
Chemical Storage Building		X			
North Klondike Undeveloped Land Area	X		4/3/98		
Undeveloped Land	O				
Outside Storage Area		X			
Soil Piles		X			
X-430 Area	X		3/31/98		
X-430 Test Stand	O				
X-431 Test Stand	O				
X-432 Test Stand	O				
X-433 Test Stand	O				
X-434 Test Stand	O				
X-435 Test Stand	O				
X-436 Test Stand	O				
Stainless Steel Tank		X			
Aboveground Storage Tank		X			
X-407 Area	X		3/31/98		
X-404 Test Stand	O				
X-405 Test Stand	O				

**TABLE 1  
ENVIRONMENTAL UNITS**

Airport/Klondike Area  
Pratt & Whitney Main Street Facility

	AREA USTM	INDIVIDUAL USTM	DATE SUBMITTED	DATE REVIEWED	DATE REVISED
X-406 Test Stand	O				
X-407 Test Stand	O				
X-408 Test Stand	O				
X-408 Test Rig Room	O				
X-409 Test Stand	O				
North Klondike Fire Pump House	O				
Compressor Building	O				
PCB Storage Building		X			
X-194 (X-448) Area	X				
X-448 Test Stand	O				
Control Room	O				
Block House	O				
Outside Storage	O				
X-194 Area	O				
Aboveground Storage Tank		X			
X-312/X-314 Area	X		4/2/98		
X-312 Test Stand	O				
X-314 Test Stand	O				
X-312 Tank Farm		X			
X-314 Septic System		X			
<b>SOUTH KLONDIKE AREA</b>					
Tie-Down Area	X		4/2/98		
X-309 Test Stand	O				
Fire Training Area A & B-24 Test Stand		X			
USTs and AST		X			
Firing Range Area					
Firing Range		X			
Former Linde Gas/Chemical Storage Building Area					
Former Linde Gas		X			
Linde Bldg. Fuel Oil UST, Load/Unload		X			
Drums and Dumpster Areas		X			
Former Underground Storage Tank		X			
Linde Septic System		X			
Cryogenics	X				
South Klondike Fire Pump House	O				
Cryogenics Building	O				
Cryogenics Drywell & Septic System		X			
Underground Storage Tank		X			
Aboveground Storage Tank		X			
		X			
Virgin Products Storage Area					
Storage Area 2		X			
Storage Area 3		X			
Quonset Hut/Drum Storage Area		X			
X-307 Area	X		4/3/98		
Test Stand X-307	O				
X-307 Septic System		X			
X-307 Rubble Piles		X			
South Klondike Undeveloped Land Area	X		4/3/98		
Undeveloped Land	O				
Debris Piles		X			
<b>SOUTH AIRPORT AREA</b>					
Fire Training Area B					
Fire Training Area B		X			
Contractor Storage Area					
Contractor Storage Area		X			
Former Storage Area					
RCRA Waste Piles		X			
Tank Trailer Storage Area					
Tank Trailer Storage Area		X			
South Airport Fill Area					
Fill Area		X			

/

## FIGURES

)

)

)

/

## DRAWINGS

)

)

)

**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**      ☐ **Other (Provide Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 1: SUMMARY SITE INVESTIGATION AND  
REMEDATION REPORT SITE LOCATION MAP &  
ENVIRONMENTAL UNITS**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

\_\_\_\_\_  
\_\_\_\_\_

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***

LOUREIRO ENGINEERING ASSOCIATES, P.C.



April 22, 1998

**US Environmental Protection Agency**  
JFK Federal Building (HBT)  
Boston, MA 02203-2211

Attn.: Juan Perez

**RE: Summary Investigation and Remediation Report - Airport/Klondike Area**  
**Pratt & Whitney, East Hartford, Connecticut**  
**LEA Comm. No. 68V8124**

Dear Mr. Perez:

Attached please find six copies of additional information for the above-mentioned report for the Airport/Klondike Area at the Pratt & Whitney facility located at 400 Main Street in East Hartford, Connecticut. The information included in this package includes the following:

- Table of Contents (Updated through Section 2)
- Section 1 (Revised)
- Section 2 (New)
- Table 1 (Updated)
- Table 2 (New)
- Figures 1 and 2 (New)
- Drawing 1 (Updated)
- Unit-Specific Technical Memoranda (USTM) Introduction (New)
- Rentschler Airport Runway Area USTM (Revised)
- X-410 Former Oil Storage Rack USTM (New)

The items above from the Table of Contents through Drawing 1 should be inserted into the binder for the main body of the report that was provided to you previously. The USTM introduction and the two USTMs should be placed into the USTM binder.

The information identified above as "New" has not been previously submitted for review. The information identified above as "Updated" has been updated to incorporate additional information. The information identified above as "Revised" has been modified to incorporate changes in direct response to review comments.

If you have any questions or comments concerning the attached information please contact me at 860-747-6181.

Sincerely,

**LOUREIRO ENGINEERING ASSOCIATES**A handwritten signature in black ink, appearing to read "T. Salimeno", is written over the printed name and title.

Thomas J. Salimeno, P.E.  
Project Manager

Attachments

pc: V. Riva, Pratt &amp; Whitney

G:\PROJECTS\PA&amp;WK\KLONDIKE\68V8124\DOC\TRANSEPALET1.DOC

100 NORTHWEST DRIVE • PLAINVILLE, CT 06062 • (860) 747-6181 • FAX (860) 747-8822

An Equal Opportunity Employer

# DRAFT

---

**SUMMARY  
SITE INVESTIGATION AND REMEDIATION REPORT  
AIRPORT/KLONDIKE AREA  
AT  
PRATT & WHITNEY  
EAST HARTFORD, CONNECTICUT  
EPA ID No. CTD990672081**

**Prepared for:**

**PRATT & WHITNEY  
A UNITED TECHNOLOGIES COMPANY  
400 Main Street  
East Hartford, Connecticut 06108**

**Prepared by:**

**LOUREIRO ENGINEERING ASSOCIATES, P.C.  
100 Northwest Drive  
Plainville, Connecticut 06062**

**LEA Comm. No. 68V8124**

---

## Table of Contents

	Page
<b>1. INTRODUCTION</b>	<b>1-1</b>
1.1 Background	1-2
1.2 Goals and Objectives	1-2
1.3 Report Organization	1-3
1.3.1 Main Document Sections and Appendices	1-3
1.3.2 Tables, Figures, and Drawings	1-4
1.3.3 Unit-Specific Technical Memoranda	1-4
1.3.4 Activity Technical Memoranda	1-5
<b>2. BACKGROUND INFORMATION</b>	<b>2-1</b>
2.1 Site Location and Description	2-1
2.2 Data Review	2-2
2.2.1 Master Files Search	2-2
2.2.2 City Directory Search	2-2
2.2.3 Fire Insurance Maps	2-2
2.2.4 Topographic Maps	2-4
2.2.5 Aerial Photographs	2-4
2.3 Site History and Ownership	2-6
2.4 Facility Operations	2-8
2.5 Waste Management Operations	2-9
2.6 Area Descriptions	2-10
2.6.1 North Airport Area	2-11
2.6.1.1 Rentschler Airport	2-11
2.6.1.2 Former Silver Lane Pickle Company	2-11
2.6.2 North Klondike Area	2-12
2.6.2.1 North Klondike Undeveloped Land Area	2-12
2.6.2.2 X-401 Area	2-12
2.6.2.3 X-407 Area	2-13
2.6.2.4 X-415 Area	2-14
2.6.2.5 X-430 Area	2-14
2.6.2.6 Explosives Storage Area	2-14
2.6.2.7 X-194 Area	2-14
2.6.2.8 X-410 Area	2-15
2.6.2.9 MERL Area	2-15
2.6.2.10 X-312/X-314 Area	2-16
2.6.3 South Klondike Area	2-16
2.6.3.1 Tie-Down Area	2-17
2.6.3.2 Firing Range Area	2-18



# DRAFT

2.6.3.3 Former Linde Gas/Chemical Storage Building Area	2-18
2.6.3.4 Cryogenics Area	2-19
2.6.3.5 Virgin Products Storage Area	2-19
2.6.3.6 X-307 Area	2-20
2.6.3.7 South Klondike Undeveloped Land Area	2-20
2.6.4 South Airport Area	2-20
2.6.4.1 Fire Training Area B	2-21
2.6.4.2 South Airport Fill Area	2-21
2.6.4.3 Tank Trailer Storage Area	2-21
2.6.4.4 Contractor Storage Area	2-21
2.6.4.5 Former Storage Area	2-22
2.7 Previous Investigations	2-22

## TABLES

Table 1      Environmental Units

## FIGURES

Figure 1      USGS Topographic Map

Figure 2      Site Plan

## DRAWINGS

Drawing 1    Site Location Map & Environmental Units

## UNIT-SPECIFIC TECHNICAL MEMORANDA

### Unit-Specific Technical Memorandum Introduction

#### North Airport:

    The Rentschler Airport Area

#### North Klondike:

    Explosives Storage Area

    MERL Area

    Undeveloped Land Area - North Klondike

    X-312 / X-314 Area

    X-401 Area

    X-407 Area

    X-410 Area

    Former Oil Storage Rack

    X-415 Area

    X-430 Area

#### South Klondike:

    Cryogenics Area

    Tie-Down Area

    Undeveloped Land Area - South Klondike

    X-307 Area

## TECHNICAL MEMORANDA

Technical Memorandum 3    Groundwater Sampling and Quality

## 1. INTRODUCTION

Loureiro Engineering Associates, P.C. (LEA) was retained by Pratt & Whitney (P&W) to conduct a voluntary subsurface investigation at a portion of the P&W facility located at 400 Main Street (Main Street facility) in the Town of East Hartford, Connecticut. The portion of the Main Street facility addressed in this summary report is known as the Airport/Klondike Area (hereinafter referred to as the Site). The subsurface investigation at the Site was undertaken on a voluntary basis pursuant to Section 22a-133x(b) of the Connecticut General Statutes (CGS). It should be noted that Section 22a-133x of the CGS was recently codified and was formerly known as Section 3 of Public Act (PA) 95-183.

The activities at the Main Street facility are also subject to a Voluntary Corrective Action Program (VCAP). On July 17, 1996, P&W and the United States Environmental Protection Agency, Region 1 (EPA-New England) signed a Memorandum of Understanding (MOU) that outlines the principle components of the VCAP. P&W's principal objective, as discussed in the MOU, is to have initiated stabilization activities at the Main Street facility on or before December 31, 1999. With P&W's desire to transfer the Airport/Klondike portion of the Main Street facility in the near future, the Airport/Klondike Area is being taken to final remediation at this time.

Pursuant to Section 22a-133x(a) of the CGS (formerly Section 3(a) of PA 95-183), P&W is going to submit an Environmental Condition Assessment Form (ECAF) to the State of Connecticut Department of Environmental Protection (DEP). P&W is completing and submitting the ECAF in support of the intention to perform the investigation and, as necessary, the remediation of the Site under the direction of a Licensed Environmental Professional (LEP) pursuant to Section 22a-133x(b) of the CGS.

Preliminary discussions held with the DEP have indicated that the voluntary investigation and remediation of the Site could be conducted pursuant to Section 22a-133x(b) of the CGS. The provisions of Section 22a-133x(b) allow for the investigation and remediation of a site under the direction of an environmental professional licensed pursuant to Section 22a-133v(e) of the CGS. It should be noted that Section 22a-133v was recently codified and was formerly known as Section 4(e) of PA 95-183. This report provides documentation of the site characterization investigations that have been performed to characterize the nature and delineate the extent of contamination identified on the Site, documentation of the remediation activities that have been

# DRAFT

conducted, and relevant information necessary to verify that the investigation and remediation have been performed in accordance with prevailing standards and guidelines.

## 1.1 Background

The P&W Main Street facility is located on over 960 acres with over 6.5 million square feet of floor area for manufacturing, research, office space, and space for related activities and support services. The Main Street facility has been used for the manufacture of aircraft engines and aircraft engine components since December 1929. Operations at the facility include (or have included in the past) metal parts machining, vapor degreasing, chemical etching, cleaning, electroplating, painting, assembly and testing, and research operations.

To the east of the main complex of the Main Street facility lies the Airport/Klondike Area consisting of the Rentschler Field and an area known as the Klondike. The Airport/Klondike Area was used for experimental test operations as well as ancillary support operations for the main complex. This approximately 600 acre Airport/Klondike Area is the Site as addressed in this report.

## 1.2 Goals and Objectives

The primary objective of the subsurface investigation was to determine whether or not there has been a release(s) to soil or groundwater due to activities conducted at the Site, and if a release is identified, to determine if remediation is required. Therefore, the subsurface investigations were conducted in a manner that would support evaluation of the need for remediation in accordance with the requirements of the Connecticut Remediation Standard Regulation (Sections 22a-133k-1 through 22a-133k-3) of the Regulations of Connecticut State Agencies (RCSA).

The subsurface investigation was designed to provide sufficient information to characterize the nature and delineate the extent of contamination detected on the Site. To achieve the stated goal and objectives, the subsurface investigation was conceived to include both environmental setting and contaminant delineation investigations. The objective of the environmental setting activities was to develop a site-wide understanding of environmental conditions in soils and groundwater, particularly in the context of how those conditions might affect the fate and transport of potential contaminants. The environmental setting investigations were also designed to characterize the unconsolidated materials in terms of physical characteristics to define the stratigraphy and soil properties of both the saturated and unsaturated zones across the Site.

The objective of the contaminant delineation investigation was to define the nature, and delineate the extent of soil and groundwater contamination at the Site. The contaminant delineation investigation was designed to include both initial and focused soil sampling activities and site-wide groundwater sampling activities. The initial activities were designed to quickly evaluate larger portions of the Site and included soil vapor surveying and geophysical surveying consisting of both time-domain electromagnetic induction (TDEM) and magnetometry. The results of the initial activities were used to direct the placement of soil borings and test-pit excavations to be conducted in the focused soil sampling activities in select areas at the Site. Groundwater contamination is evaluated from a site-wide perspective due to the nature of groundwater movement and contaminant transport.

## **1.3 Report Organization**

This summary report documents the investigation and remediation activities completed for the Airport/Klondike Area between June 1996 and June 1998, interprets the data collected, and provides conclusions derived from this data.

### **1.3.1 Main Document Sections and Appendices**

In presenting the investigation and remediation activities completed for the Airport/Klondike Area, section discussions are followed by supporting tables, figures, and drawings. The following is a general description of the contents of each of the following sections of the report.

- Section 2 includes a summary facility description and includes pertinent background information. In addition, it contains information regarding facility operations and former investigations conducted at the Site.
- Section 3 describes the methodologies for the field investigation activities performed during the Site characterization. These activities included the performance of soil vapor and geophysical surveys, soil boring installation, monitoring well installation, the performance of test-pit excavations, and soil and groundwater sampling.
- Section 4 describes the methodologies for the management, documentation, and presentation of the data collected as part of the investigation and remediation activities.
- Section 5 presents the results of the environmental setting investigations conducted at the Site. In addition, it details the environmental setting of the Site and includes

discussions of the site-specific geologic and hydrogeologic conditions encountered and of regional geologic and hydrogeologic conditions as derived from available published information.

- Section 6 presents a site-wide overview of the soil and groundwater analytical results obtained during the contaminant delineation investigations.
- Section 7 provides an evaluation of the soil and groundwater data against the applicable numeric criteria established pursuant to the Remediation Standard Regulation (RSR).
- Section 8 presents the remediation activities that were conducted at the site to satisfy the RSR.
- Section 9 presents a summary of the findings of the investigation and remediation activities performed to date and conclusions.

### **1.3.2 Tables, Figures, and Drawings**

To maintain the readability of this report and to prevent the numerous tables and figures from interfering with the flow of the text, all of the tables, figures, and drawings have been placed after the final text sections of the main body of the report. Table and figure groupings are marked with dividers so readers can easily refer to them when necessary. Supporting documents, including daily field reports, analytical data, boring logs, well completion logs, and geophysical investigation reports can be provided under separate cover.

### **1.3.3 Unit-Specific Technical Memoranda**

Technical Memoranda that present the results of soil sampling and analysis in the vicinity of specific environmental units that were investigated as part of the Site investigation activities have been prepared to aid in the identification and evaluation of sources or potential sources of contamination at the Airport/Klondike Area of the P&W Main Street facility. These Unit-Specific Technical Memoranda (USTMs) include pertinent background information for each of the environmental units for which a subsurface investigation was conducted. USTMs were also prepared for those units that did not warrant a subsurface investigation.

The investigations were not intended to specifically address the occurrence of contamination in groundwater. Groundwater contamination is evaluated from a site-wide perspective due to the nature of groundwater movement and contaminant transport. However, to provide a

comprehensive presentation of the available information, a summary of groundwater information is included in the USTMs. Additional information concerning the USTM organization and conventions is included in a separate introduction for the USTMs.

As applicable, each USTM includes the rationale for conducting any investigation activities at that location, an outline of any investigation that was performed, analytical results from the investigation, and any conclusions based on the data collected. In cases where remediation activities were conducted, each USTM also includes the rationale for conducting any remediation activities at that location, an outline of any remediation activities that were performed, the analytical results upon completion of the remediation activities, and conclusions based on the data collected.

#### **1.3.4 Activity Technical Memoranda**

Technical Memoranda (TMs) describing investigation or remediation activities that were undertaken as part of the Site investigation and remediation have been included as part of the report to document those activities in greater detail than would be feasible in the main body of the report. In all, four TMs have been prepared. The titles are noted below:

- TM 1, *Monitoring Well Installation and Development and Soil Sampling*
- TM 2, *Water Level Measurements*
- TM 3, *Groundwater Sampling and Quality*
- TM 4, *Background Soil Data*

These TMs have been presented in several separate volumes following the main body of the report and the volumes containing the USTMs.

## **2. BACKGROUND INFORMATION**

The intent of this section is to provide the reader with an overview of the Site background information. This section provides background information pertinent to the Site and includes information on the Site location, a description of operations conducted, and a discussion of the layout of the Site.

### **2.1 Site Location and Description**

The Pratt & Whitney (P&W) Main Street facility is located on over 960 acres with over 6.5 million square feet of floor area for manufacturing, research, office space, and space for related activities and support services. The facility has been used for the manufacture of aircraft engines and aircraft engine components since December 1929. Operations at the facility include, or have included in the past, metal parts machining, vapor degreasing, chemical etching, cleaning, electroplating, painting, assembly and testing, and research operations.

To the east of the main factory complex of the Main Street facility lies the Airport/Klondike Area consisting of the Rentschler Airport and an area, known as the Klondike, formerly used for experimental test operations as well as ancillary support operations for the main factory complex. This approximately 600 acre Airport/Klondike Area is the Site as addressed in this report.

The Main Street facility is bordered on the north by a residential neighborhood and Silver Lane, on the south by a residential neighborhood and Brewer Street, on the west by Main Street and a residential area, and on the east by a residential area and Penney High School. A topographic map of the site was prepared from portions of the Glastonbury, Hartford-North, Hartford-South, and the Manchester United States Geologic Survey (USGS) 7.5 minute topographic maps and is included as Figure 1. A site plan of the entire facility is provided as Figure 2. Figure 2 also indicates the Airport/Klondike Area which is the focus of this report.

Willow Brook runs through the north end of the complex in an east to west direction toward the Connecticut River. The brook is dammed and ponded in the vicinity of the Centralized Waste Storage & Transfer Facility (CWS&TF) located within the Main Street facility. The United Technologies Research Center (UTRC) (EPA ID No. CTD095532131), through which a portion of Willow Brook passes, is located on the north central border of the Main Street plant and does not constitute part of the Main Street facility.



Overall, the Main Street facility has been divided into 26 study areas. Of these study areas, the 4 areas that encompass the Airport/Klondike Area include the North and South Airport Areas and the North and South Klondike Areas as shown on Drawing 1. Within the 4 study areas addressed in this report, there are a total of 24 sub-areas. Within the 24 sub-areas, there are a total of 104 environmental units that are described in 63 Unit-Specific Technical Memoranda (USTMs). A complete listing showing the study areas, the sub-areas, the environmental units, as well as the breakdown of the USTMs is included in Table 1.

## **2.2 Data Review**

The Airport/Klondike Area has been the subject of specific investigations and included in site-wide investigations related to environmental conditions since the mid-1960's. These reports and other sources of information were reviewed in an attempt to consolidate the information and evaluate the coverage to determine the focus of future investigation and remediation activities. A listing of reports addressing investigations conducted in the Airport/Klondike Area is included in the References at the end of this report.

### **2.2.1 Master Files Search**

Documents contained in the files of the Environment, Health and Safety Group at the P&W East Hartford facility were reviewed by Loureiro Engineering Associates, P.C. (LEA) personnel for information related to the Airport/Klondike Area. Maps, photographs, and figures which were included in the General Environmental Files were reviewed to see if they contained pertinent information related to the Airport/Klondike Area. Additional historical information, including layout drawings, was gathered from the Andrew Willgoos Gas Turbine Laboratory files and Facilities and Services files.

### **2.2.2 City Directory Search**

A search of historical city directory records was performed by Environmental Data Resources Sanborn, Inc. (EDR) for the Main Street facility. The search did not locate any information for the facility.

### **2.2.3 Fire Insurance Maps**

Database searches were performed to retrieve historical information available for the Main Street facility. LEA contracted with EDR to provide copies of all available fire insurance maps of the area.

# DRAFT

The search revealed that twenty-four Sanborn® fire insurance maps were available for the general vicinity of the three P&W East Hartford facilities. Maps were available for the following years: 1903 (two maps); 1908 (three maps); 1913 (four maps); 1920 (four maps); 1927 (three maps); 1949 (three maps); and 1968 (five maps). However, the Main Street facility was never directly mapped by the Sanborn Company.

The 1903 Sanborn® maps show that the Main Street area of East Hartford was primarily a mixture of residences and tobacco sheds. The area to the northeast of the Brewer Street - Main Street intersection is labeled as "vacant".

The 1908 Sanborn® maps show that the Main Street area remained primarily a mixture of residences and tobacco sheds. The area presently occupied by a portion of UTRC and Rentschler Airport was occupied at that time by the Silver Lane Pickle Company. The area to the northeast of the Brewer Street - Main Street intersection is still labeled as "vacant".

The 1913 Sanborn® maps show that the area remained essentially the same as it was in 1908: a mixture of residences and tobacco sheds along Main Street. The 1913 maps show the Connecticut Tobacco Company offices and warehouses along Willow Street, approximately 1000 feet east of Main Street.

The 1920 Sanborn® maps show little change along Main Street in the area of the Main Street facility. A post office is shown on the northeast corner of the Brewer Street - Main Street intersection and the Connecticut Tobacco Company facility remains on Willow Street. The Silver Lane Pickle Company factory is still present.

The 1927 Sanborn® maps show that the Main Street area has remained unchanged along the eastside. However, two auto repair facilities have been established along the west side. The Silver Lane Pickle Company remains, and the post office is still shown to the northeast of the Brewer Street - Main Street intersection. A service station is shown just to the north of the post office and two gasoline tanks are indicated.

The 1949 Sanborn® maps show a general outline of the P&W buildings on Main Street. The former American Sumatra Tobacco Company offices are shown, labeled as "Pratt & Whitney Aircraft Company", and a general outline of the western edge of the main factory building appears. The power-house is shown, as is the former Hamilton Standard Propellers company building south of the main P&W factory building. The 1949 map shows the expansion of the facility including the main plant, J Building, and the hangars with ancillary buildings. There was no mapping to the east of the P&W property.

# DRAFT

The 1968 Sanborn<sup>®</sup> maps show the Main Street facility as belonging to P&W, but no mapping was done because admittance to the facility was refused. Mapping was not done to the east, probably because of the residential nature of the area. The area previously occupied by the Silver Lane Pickle Company was marked as belonging to P&W, the Pickle Company buildings were crossed off and the notation "all buildings removed" was evident on the maps.

## 2.2.4 Topographic Maps

EDR also reviewed and provided historical topographic mapping for the Main Street facility. The Main Street facility lies at the intersection of four quadrangles: Hartford North, Hartford South, Manchester, and Glastonbury. EDR provided copies of most but not all historical topographic maps for the site. It should be noted that the information provided below is based solely on map comparison for the years available, and parts of the information provided may contain gaps due to incomplete mapping.

The 1952 topographic map shows the Main Street facility at its present location and the Silver Lane Pickle Company facility in the vicinity of the current UTRC building. The Manchester quadrangle was not available for this year. The 1963/1964 topographic maps show the Silver Lane Pickle Company buildings removed and the UTRC building constructed. The P&W factory complex was in place.

The 1968/1972 topographic maps show the Main Street facility unchanged since 1963/1964, and the office buildings in the Rentschler Airport were shown as constructed. There was evidence of some construction of small buildings in the Klondike Area. The 1984 topographic maps show minor construction at the airport, and additional construction in the Klondike Area. The 1992 topographic maps show some minor additions to the main factory buildings, an additional office building, some road construction, and some additional buildings in the Klondike Area.

## 2.2.5 Aerial Photographs

Aerial photographs of the Airport/Klondike Area were available from several sources. In addition to those on file and privately flown by P&W, aerial photographs were also on file with the State of Connecticut Department of Environmental Protection (DEP), the Connecticut State Library Archives, the United States Environmental Protection Agency (EPA), and various commercial sources.

A survey of aerial photographs available for the site was also performed by EDR. EDR's review indicated that the readily available photograph was from 1951. A color infrared photograph was

# DRAFT

reported to be available from 1986. The origins of the photographs were not reported. The photographs are available from National Aerial Resources, Inc.

In addition, aerial photographs of the facility were taken in April 1990 by Golden Aerial Survey, Inc. in an effort to obtain an accurate topographic map of the facility. The topographic map developed based on the aerial photographs identified all buildings and roads at the facility at a scale of 1 inch equals 200 feet.

As mentioned previously, aerial photographs were contained in the master files of the Environment, Health and Safety Group. Furthermore, a record of photographs (including aerial photographs) of the Main Street facility is maintained by the P&W Photographic Services Department. A review of archive photographs from early 1930's until the present was conducted for those photographs which show the development and detail of the Airport/Klondike Area.

Aerial photographs on file with the DEP for the years of 1965, 1970, 1975, 1980, 1986, and 1990 were reviewed for those flight lines which passed over the Airport/Klondike Area. The expansion and development of the Site was clearly visible in these photographs. Between 1965 and 1970, development of the South Klondike Area consisted of the original X-307 test stand, the area of drum storage south of the Cryogenics Building, the Quonset Hut, the six storage yards in the Virgin Products Storage Area, the Contractor Storage Area, and the new control tower on the south end of the airport.

The 1975 photographs shows the lengthening of the airport runways. The 1980 photograph shows the construction of Fire Training Area A. In the 1986 photograph, the Linde Gas Plant has been replaced with the Chemical Storage Building. In general, the 1990 photograph shows lessened activity in the Klondike Area as indicated by smaller quantities of equipment and vehicles present.

Archive aerial photographs on file in the Connecticut State Library for 1934 and 1951 were reviewed for those flight lines which passed over the Rentschler Airport and the Klondike Areas. In the 1934 photograph, the airport was new and there was no development of the Klondike Area. In the 1951 photograph, the first development of the North Klondike Area was visible.

A request was made to the EPA for information regarding aerial photographs. Apparently the flight lines flown for the USGS are the same lines used by the EPA. The EPA had no specific flights over the East Hartford Area. A 1981 photograph obtained from the EPA included the Site, but did not have enough detail for use. No photographs were requested from the USGS due

to similar coverage and the amount of processing time required to fulfill the request (approximately two to three months).

Large-scale aerial photographs for 1965, 1970, and 1975 were obtained from Keystone Aerial Surveys Inc. A large-scale aerial photograph for 1980 was obtained from AeroGraphics Corporation. These photographs were at a scale sufficient to provide a great deal of detail for the majority of the Site. Overall, these photographs provided confirmation of the information obtained from the various other photographs and sources of information.

## **2.3 Site History and Ownership**

The majority of the property on which the Main Street facility is currently located was purchased by United Aircraft Corporation, now United Technologies Corporation, from American Sumatra Tobacco Company in 1930. At the time it was purchased, the eastern portion of the property, which subsequently became the Airport/Klondike Area, was a tobacco field. Over time, additional parcels were purchased and included as part of the Main Street facility.

Rentschler Field was opened in 1931 and at that time it was an all-turf airfield. The all-turf airfield consisted of approximately 165 acres of land constructed to promote drainage and suitable for use in all weather conditions and seasons. During the initial operations, Rentschler Field had two hangars including a service hangar and an experimental hangar.

Originally created as a test field, Rentschler Field was subsequently expanded into a service center for the overhaul and maintenance of P&W engines. The airfield served as a base for experimental flight tests of airplanes, engines, and propellers. The hangars associated with the airport were used to service company-owned and customer-owned airplanes. The airport was used for scheduled flights by American Airlines in 1939 and for the flight testing of the Vought Corsair.

Construction of an airport expansion began in 1939 and was completed in 1941. In 1941, the hangars were moved more than one-half mile from an area to the west of the runways, in the approximate location of L and M Buildings within the main factory complex, to the northwest edge of the field at their present location. Coinciding with the airport expansion, the hangar size was doubled. At that time, the runways were paved and the runways extended to 3,500 feet for the north-south runway and 3,000 feet for the northeast-southwest runway. The expansion of the airport also included the construction of a control tower, the construction of an experimental laboratory, and offices. The majority of these construction activities were completed to the west and off the Site.

P&W's Airport Division cooperated in the war program by overhauling engines in service to the United States (U.S.) Armed Forces, the British Air Commission and other major airlines and companies engaged in the war effort. The airfield also became the operating base for certain U.S. Armed Forces, the British Air Commission, major airlines and companies engaged in the war effort. In support of the war effort, U.S. Army Air Forces pursuit groups, which provided fighter-plane protection for manufacturing plants in the greater Hartford area, were based at the airport. Between 1941 and 1945, the Main Street facility and the airport were leased by the U.S. government as part of this war effort.

In 1945, the airfield was modernized and expanded to include three asphalt runways, each a mile long, and a fully equipped, 57-foot control tower. Given the low elevation of the airport, fill was excavated from the Klondike Area and placed on the airport. This excavation accounts for some of the wetland areas in the undeveloped area along the east side of the North Klondike Area. During this period, the Tie-Down Area, located in the South Klondike Area, was used to secure aircraft close to the runways. The Tie-Down Area was also used for aircraft refueling from an aboveground storage tank. In 1947 the name of the airport was changed from Rentschler Field to Rentschler Airport.

Throughout the 1930's and part of the 1940's, the Klondike Area remained undeveloped. In the early 1950's, the North Klondike Area was developed to include the numerous buildings and test stands in association with a project code named "Suntan". It has been reported by various sources that the term "Suntan Project" resulted from the use of hydrogen in test stands. At approximately this same time, undeveloped parcels to the east and south of the developed portion of the North Klondike Area were purchased.

In the late 1950's, the South Klondike Area was developed to include the Linde Gas Plant, the Cryogenics Building and the Fire Pump House. A firing range also existed in the South Klondike Area, although the exact times of construction and operation are unknown. A large portion of the Klondike Area, along the eastern most edge of the property, has been undeveloped throughout its history.

A new control tower, at the south end of Rentschler Airport, was built and occupied by May 1966. At that time, parking areas were enlarged to accommodate the expanding work force at the airport. Between 1965 and 1970 the South Klondike Area was expanded with the drum storage areas, the Quonset Hut Storage Area, the X-307 test stand, and the six storage yards included in the Virgin Products Storage Area. In 1967, new experimental test cells for the JT9D engine were constructed in the Klondike Area.

Rentschler Airport runways were lengthened in 1971. A microwave landing system was also installed in 1971 to improve night landings. With these improvements, Rentschler Airport became the second largest airport in Connecticut, smaller only than Bradley International Airport. Few major changes took place in the 1980's.

The majority of the Klondike Area remained active until the early 1980's when some test stands were dismantled and moved to other facilities off the Site. Through the late 1980's and early 1990's, the use of the Klondike Area was gradually diminished. The buildings in the Klondike Area were razed in 1993 with the exception of the generator/transformer room associated with the Fire Pump House in the South Klondike Area. The Airport was shut down in December 1994. Currently, the Airport/Klondike Area is no longer used for any production, testing or research operations.

## **2.4 Facility Operations**

The Main Street facility is involved in the manufacture, development, and testing of jet engines and jet engine components. The facility has been used for the manufacture of aircraft engines and aircraft engine components since December 1929. Operations at the facility include, or have included in the past, metal parts machining, vapor degreasing, chemical etching, cleaning, electroplating, painting, assembly and testing, and research operations.

The Airport/Klondike Area was formerly used for experimental test operations as well as ancillary support operations for the factory main complex. There were various test stands or test cells for conducting test operations. Overall, most any type of testing for aircraft engine, jet-engine, rocket components were conducted within the test stands. The various types of testing included airflow, erosion, combustion, fire resistance, anti-icing, sound abatement, foreign object ingestion, crosswind, and vertical takeoff or landing (VTOL) performance.

To support the testing operations, the test stands were provided with any or all of the following services and utilities: compressed air, oxygen, hydrogen, nitrogen, methane, propane, DC and AC power (120, 240, and 480 volts), fuels (hard-piped or tank), fire protection equipment, and vacuum supply. The fuels for the test operations were either supplied from a central tank farm, such as the X-312 tank farm, from local tanks in the particular area, or from containers.

In the X-312 tank farm, the fuels were stored in three 3000 gallon, two 5000 gallon, and one 15,000 gallon underground storage tanks (USTs). From the USTs, the fuels were distributed by 3-inch underground piping to the X-307, X-309, and X-312 test stands. The fuels typically used included JP-4 and JP-5 jet fuels. Other test areas were provided with local aboveground storage

tanks (ASTs) if any appreciable quantities of fuels were necessary. A listing of both ASTs and USTs that have been identified is included on Table 2. This listing of tanks includes all tanks that have been identified including those providing fuels for testing operations or fuels for heating. Table 2 does not include tanks used for the storage of gases such as hydrogen, nitrogen, oxygen, or propane.

For the ancillary support activities, the South Klondike Area was predominantly used for materials storage such as the storage of virgin product used in the manufacturing operations and wastes resulting from the production operations. While the main waste storage and handling areas were part of the main factory complex, some waste storage of production wastes was reported for the Virgin Products Storage Area. Containers of oils and solvents have been stored on both paved and unpaved areas within the South Klondike Area. Another support activity in the South Klondike Area was the Linde Gas Plant for the production of hydrogen from natural gas.

Various areas within the Airport/Klondike Area were used to conduct fire training exercises. Flammable and combustible materials were used in the fire training exercises for the airport crash response team. Typically, the area was an earthen depression that was filled with flammable and combustible liquids prior to fire-fighting training exercises. One of the areas, Fire Training Area A, was a specially-constructed concrete and pavement area for the fire training exercises.

## **2.5 Waste Management Operations**

The Main Street facility is involved in the manufacture, development, and testing of jet engines and jet engine components. Materials and processes used in those operations generate, or have generated, large quantities of wastes. These wastes include, or have included, industrial wastewater, dilute oily wastes, characteristic hazardous wastes (i.e., ignitable, corrosive, reactive, and toxic) and listed hazardous wastes (e.g., spent solvents).

P&W also utilizes, or has utilized, a wide variety of products that are hazardous wastes such as acids, alkalies, cyanides, alcohols, metal plating solutions, specialty solutions, fungicides, epoxy, cleaners, resins, paints, solvents, fuels, and many commercial chemical products listed in 40 CFR 261.33(e) and (f). PCB wastes have also been generated at the Main Street facility.

Specific processes which use the above products and which result in the generation of hazardous wastes include or have included the processes listed below. Note that processes followed by an asterisk (\*) have virtually been eliminated at the Main Street facility based on present operations.



- Product rinsing, stripping, cleaning, degreasing, alkali and acid cleaning, vapor degreasing\*, salt bath descaling;
- Electroplating, etching, plating, anodizing, heat treating, electroless plating, painting operations, acid treatment (pickling), chromate conversions\*;
- Abrasive jet machining, chemical machining, electrochemical machining\*, electrical discharge machining, general machining;
- X-ray testing, fluorescent penetrant inspection, magnetic penetrant inspection, photo developing; and;
- Sludge removal, solvent reclamation\*, battery replacement spill cleanup, process decontamination, cleaning fuel systems, remediation and decommissioning activities, removal of obsolete materials, machine oil changes, general maintenance and housekeeping activities.

In terms of the Airport/Klondike Area, the wastes could have included many of the same types of wastes generated at the main factory complex. These wastes could have included industrial wastewaters, dilute oily wastes, characteristic hazardous wastes (i.e., ignitable, corrosive, reactive, and toxic) and listed hazardous wastes (e.g., spent solvents) resulting from the test operations.

## 2.6 Area Descriptions

A general description of each of the sub-areas is provided below with more detailed discussions regarding the specific environmental units within each sub-area provided in the applicable USTM included with this report. These environmental units were selected based on the types of activities conducted at each area and the potential for those activities to have adversely impacted the various environmental media at the Site including, soil, groundwater, surface water, and sediment. Although other areas of the Site may have been impacted by historic practices at the Site, no other specific potential contaminant source areas were evident from the available information.

The Airport/Klondike Area is located on the eastern portion of the P&W Main Street facility on the east side of the main plant, north of Brewer Street and south of Silver Lane. The Airport/Klondike Area consists of 4 study areas that include the North and South Airport Areas and the North and South Klondike Areas. Within the 4 study areas addressed in this report, there

are a total of 24 sub-areas. Within the 24 sub-areas, there are a total of 104 environmental units that are described in 63 USTMs. The layout of the Airport/Klondike Area complete with the study areas and sub-areas is shown on Drawing 1. A complete listing showing the study areas, the sub-areas, the environmental units, as well as the breakdown of the USTMs is included in Table 1.

## **2.6.1 North Airport Area**

The North Airport Area is an approximately 211 acre area that generally includes the majority of the airport proper. The North Airport Area consists of two sub-areas comprised of a total of six environmental units that are described in five USTMs. A complete listing showing the study areas, the sub-areas, the environmental units, as well as the breakdown of the USTMs is included in Table 1. The layout of the North Airport Area is shown on Drawing 1. A brief description of the two sub-areas is provided below.

### **2.6.1.1 Rentschler Airport**

For purposes of this study, the Rentschler Airport Area is generally limited to the runway and taxi areas. The aircraft hangars and the airport terminal are not included as these areas are not part of the Airport/Klondike Area, the Site, that will be sold or transferred. The airfield was opened in 1931 as an all-turf airfield. Improvements were made through the years which resulted in the present configuration of two main runways. The Rentschler Airport was used for the take-off and landing of a variety of commercial and military aircraft.

Army Barracks that were used as temporary quarters of military personnel were once located on the northwestern portion of the airfield. The Army Barracks extended from the northern end of the north-south runway continued westward into the present UTRC Area. There were approximately thirty-three buildings (including barracks, mess, recreation, dispensary, supply and administration operations, warehouses, school, and radio) that were part of the Army Barracks complex.

### **2.6.1.2 Former Silver Lane Pickle Company**

Based on available information, the Silver Lane Pickle Company had a varied production line that included different kinds of pickles and vinegars, horseradish, horseradish root, chowchow, German mustard, pepper relish, onion relish, sauerkraut, piccalilli, dill tomatoes, ketchup, and chili sauce. The former Silver Lane Pickle Company had three different areas where there were USTs of unknown sizes identified. From the northeast to the southwest, there were two USTs

with a dispenser pump at one location, three USTs at a second location, and one UST at a third location. The former contents of the USTs are not known, but were likely to have been fuels.

The Silver Lane Pickle Company sold the property to United Aircraft in 1954 and 1963 with the former buildings being demolished in 1963 and 1964. Since 1964, the property has been undeveloped. Along the western boundary of the former Silver Lane Pickle Company property, there are several contiguous piles of soil which contain various rubble and debris. Origin and reason why the soil piles were created is not known. It is possible that the soil piles were created during the demolition of the former buildings.

## **2.6.2 North Klondike Area**

The North Klondike Area is an approximately 116 acre area that generally includes the northern half of the area to the east of the airport. The North Klondike Area consists of ten sub-areas comprised of a total of seventy environmental units that are described in thirty-two USTMs. A complete listing showing the study areas, the sub-areas, the environmental units, as well as the breakdown of the USTMs is included in Table 1. The layout of the North Klondike Area is shown on Drawing 1. A brief description of the ten sub-areas is provided below.

### **2.6.2.1 North Klondike Undeveloped Land Area**

The land north and east of the developed portion of the North Klondike extends almost to Silver Lane to the north and Penney High School to the east. This area is mostly wooded, but has been cleared in some locations. Filling of low-lying areas and the accumulation of soil piles and debris has taken place along the western side of the North Klondike Undeveloped Land Area. Reportedly, this location has been used for parking lot sweepings and construction demolition materials. To the east of the soil piles, an area had been cleared, filled, and was used for the storage of vehicles. The area to the east has not been developed. Based on available information, the undeveloped area along the eastern edge of the Site has only been used for borrow material when filling and developing the airport.

### **2.6.2.2 X-401 Area**

The X-401 test stand area consisted of one building, one shed, and a covered area (the Pavilion) containing a storage tank. Within the two buildings were test stands X-401, X-402, and X-403. Also included within this area were the Locker Room, Fire Training Area C, and the X-401 Dry Wells. The main building, which housed test stands X-401, X-402, and X-403, consisted of a concrete floor with two rooms and corrugated steel walls. The northern room contained the test

cells and the southern room contained the control room. The test cells were equipped with an exhaust duct and heat exchanger. Adjoining the test cells, a compressor was housed in a corrugated steel and wood frame enclosure and apparently provided the compressed air for engine testing.

The equipment shed was a wooden structure on a concrete slab floor. The conduit and an electrical service junction box rose from the floor in the southwest corner of the former shed. The Pavilion consisted of wooden frame structure with a corrugated metal roof. The floor was comprised of steel grating placed over a concrete block support. Copper tubing fuel lines connected the test cells/control room to the Pavilion, following a utility trestle which passed over the entrance drive to the control room.

Fire Training Area C was near the western edge of the X-401 Area. Flammable and combustible materials were used in the fire training exercises for the airport crash response team. An earthen pit was filled with water prior to fire-fighting training exercises.

Three dry wells were located north and west of the main building and received waste fluids from the test stands following tests. With the usage of fuel and cleaning solvents, these fluids may have been discharged to the dry wells. The X-401 Locker Room, which was located on the southeast edge of this area, was used by workers as a changing area and to wash up at the end of the day's activities. The Locker Room septic system was located north of the Locker Room.

### **2.6.2.3 X-407 Area**

The X-407 Area consisted of five buildings and two sheds. The largest building contained the X-404, X-405, X-406, and X-407 test stands. Three smaller buildings contained the X-408 and X-409 test stands and a compressor. The compressor building was used to generate compressed air for engine tests. One shed on the southern portion of the area contained the North Klondike Pump House with booster pumps for the fire protection system.

This area was used as a general purpose test stand for testing any components requiring the available services and building construction. In addition, this area was also used as an erosion test stand which included the application of a flame and particles to a test specimen. In this area, engine tests were conducted which required the use of jet fuels and cleaning solvents. Tests were conducted from approximately 1957 until November 1979. At that time, the X-404, X-405, X-406, and X-407 test stands were converted for the storage of PCB-contaminated material and eventually closed and demolished in 1993.

## **2.6.2.4 X-415 Area**

The X-415 Area consisted of one building and one shed. The building contained the X-415, X-416, X-417, X-419, X-420, X-426, X-427, X-449, and X-450 test stands. The test stands were designed to handle small-scale (i.e., "Bunsen Burner" sized) combustion experiments and for research and basic experimentation on advanced combustion projects. Infrared tests were conducted in the long and narrow portion of the building. To the east of the building was a shed which housed the X-451 test stand. An oil-fired boiler complete with an AST was operated in this area.

The X-415 Area was equipped with a washroom and toilet with a septic system located to the east of the test stand. A dry well was located east of this area and likely received drainage from the building either from the floor drains or plumbing fixtures.

## **2.6.2.5 X-430 Area**

The X-430 Area consisted of one building. The building contained the X-430, X-431, X-432, X-433, X-434, X-435, and X-436 test stands. Specific information on the test operations for this area were not available. It is believed that at a minimum, this area was used as a general purpose test stand for testing any components requiring the available services and building construction. Testing in this area began in approximately 1957. Records show that these test stands were idle in November 1989. The building was demolished in 1993.

## **2.6.2.6 Explosives Storage Area**

The Explosives Storage Area was located on the eastern side of the North Klondike Area and consisted of two buildings, a shed (fence-enclosed), and open storage areas. The buildings and areas were used to store explosives and chemicals. Other portions of the area was used for the general storage of parts and vehicles. These areas were generally utilized for storage of explosives (hydrazine, nitrogen tetroxide, and pentaborane) and chemicals (acids and gases). Although specific references have not been identified, it is possible that portions of this area was also used for storage of motor fuels and cleaning solvents. This area was used from approximately 1957 until the buildings were demolished in 1993.

## **2.6.2.7 X-194 Area**

The X-194 Area (also known as the X-448 Area) consisted of three buildings. The two larger buildings contained the test stand and control room for the area. The smaller building was

known as the Block House. In this area, research activities were conducted which included test burns of tubes containing beryllium powder in a chemical binder. Tube-sized rocket motors that were powered with beryllium-containing fuels were also tested in this area.

In addition, PCB oils and PCB-contaminated electrical equipment were reportedly stored in this area. These materials may have been stored in the Block House which was a fortified structure originally used for the storage of beryllium fuels. Also included was a fenced, paved storage area for U.S. Government owned equipment. The grass areas to the north and northeast of this area were used to store transformers, capacitors, and other mechanical equipment. The building was later used to store fuels and oils in 55-gallon drums. This building was also used for storage of office equipment and racks for electrical equipment.

During operation, there was reportedly a wet air scrubber to the south of the test stand to remove beryllium particles from the test exhaust. After filtration, the water from the scrubber was reportedly discharged to the sedimentation pond southeast of the test stand.

#### **2.6.2.8 X-410 Area**

The X-410 Area consisted of four buildings and two stands. One building contained the X-410, X-411, and X-412 test stands including the control rooms connected to each of the test stands. One of the other large buildings was the Maintenance and Storage Building which was in the northeast portion of the area. The Maintenance and Storage Building was equipped with a washroom and toilet with a septic system located to the south of the building. Compressed gasses (oxygen and acetylene) along with batteries and lighting ballasts were stored in the Maintenance and Storage Building. Typical maintenance activities included welding, torch cutting, and vehicle maintenance.

This area was a general purpose combustion component test facility designed to develop small combustion components such as gas turbine main burners. In addition, this area was also used for conducting combustion developed sound surveys. The X-412 test stand was used to study the fire resistance of fuel control and gearbox components. In this area, engine tests were conducted which required the use of jet fuels and cleaning solvents. Tests were conducted from approximately 1957 until June 1984. The buildings were demolished in 1993.

#### **2.6.2.9 MERL Area**

The MERL Area consisted of two buildings and one shed. One building contained an explosives forming test house. An undesignated building was located east of the test house and a test shed

was south of this building. Minimal information on the operations for this area was available. In this area, explosives forming of sheetmetal was reportedly conducted. The buildings were demolished in 1993.

Fire Training Area D was located in this area. Flammable and combustible materials were used in the fire training exercises for the airport crash response team. An earthen pit was filled with water prior to fire-fighting training exercises.

## **2.6.2.10 X-312/X-314 Area**

The X-312/X-314 Area consisted of two test stands with ancillary sheds and an underground storage tank farm. The X-314 test stand was used for radial sound surveys. Instruments (microphones) were set up on the outside radius of the cleared area surrounding the test stand. This test stand was an outdoor test facility designated for inlet and exhaust sound surveys, performance calibrations, crosswind testing, foreign object ingestion, and thermal distortion tests of the largest turbofan engines. The X-314 test stand was equipped with a washroom and toilet with a septic system located north of the stand trailer. This area was used from approximately 1957 until demolition in 1990.

The X-312 test stand was an open test stand comprised of a blacktop test pad. The stand was provided with a flat roof overhead shelter and roll-up canvas curtains for weather protection. Controls and instrumentation required to operate the test engines and monitor its performance were in a wood framed control room located approximately 75 feet from the test stand. In the X-312 test stand, engine tests including exhaust silencer, crosswind generator, foreign object ingestion gun, portable microphones, icing system, smoke testing, and strain gauge measurements were performed.

The X-312 Tank Farm was a fuel distribution system for test stands immediately to the north and to the south in the South Klondike. The six USTs comprising the tank farm were located at the southwestern corner of this area. Three 3,000-gallon, two 5,000-gallon, and one 15,000-gallon USTs provided fuel supply for the four adjacent test stands. Fuel was fed to test stands through a 3-inch underground pipe network. This area was used from approximately 1957 until its demolition in 1990. Records that detail the closure activities for the tank farm were unavailable.

## **2.6.3 South Klondike Area**

The South Klondike Area is an approximately 131 acre area that generally includes the southern half of the area to the east of the airport. The South Klondike Area consists of seven sub-areas

comprised of a total of twenty-three environmental units that are described in twenty-one USTMs. A complete listing showing the study areas, the sub-areas, the environmental units, as well as the breakdown of the USTMs is included in Table 1. The layout of the South Klondike Area is shown on Drawing 1. A brief description of the seven sub-areas is provided below.

### **2.6.3.1 Tie-Down Area**

Originally, the Tie-Down Area was used to secure aircraft close to the runways. The Tie-Down Area is located adjacent to the Perimeter Road and between the North and South Access Roads. The Tie-Down Area was also used for general storage of various equipment and parts.

The Tie-Down Area consisted of two engine testing areas (X-309 and B-24), a storage area, and Fire Training Area A. The X-309 test stand was an outdoor test facility designed for specialized testing of turbojet engines on the northern edge of the Tie-Down Area. The specialized testing included basic engine calibration, anti-icing, sound abatement, foreign object ingestion, crosswind, and vertical takeoff or landing (VTOL) performance. The engine exhaust area was covered with trap rock held down with heavy wire screen to prevent erosion. The X-309 test stand was dismantled in June 1984 and the rest of the area was demolished in 1993.

The B-24 test stand consisted of a concrete trench and an exhaust deflector on the southern edge of the Tie-Down Area. Tests were conducted in this area by suspending an operational engine from the bomb bay of a B-24 airplane into the concrete trench. Exhaust from the engine was directed into the exhaust deflector. The tests conducted in this area required the use of jet fuels and cleaning solvents. The exhaust deflector used in for the B-24 test stand remains.

Fire Training Area A, which was used from the late-1960s to the late-1980s, was along the south-eastern portion of the Tie-Down Area. Flammable and combustible materials were used in the fire training exercises for the airport crash response team. Originally, Fire Training Area A was an earthen depression that was filled with flammable and combustible liquids prior to fire-fighting training exercises. Reportedly, the training fires were conducted in shallow pans directly on the soil.

In 1984, Fire Training Area A was upgraded with the construction of concrete burns pit within an asphalt area. The impacted soils resulting from the prior use of the area were reportedly excavated for disposal off the site. The reconstructed Fire Training Area A consists of a paved area which measures 80 feet by 100 feet with asphalt berms running along the perimeter. Within the paved area, there are three concrete burn pits of various sizes that were used for the training fires. Catch basins are located in the center of the overall area as well as in each of the concrete



containment pits to collect rain water or any flammable liquids. The catch basins drain to an oil/water separator. Water from the separator discharged to the intermittent pond on the south side of the area.

### **2.6.3.2 Firing Range Area**

A firing range was identified on an available drawing depicting a portion of the South Klondike Area. The firing range consisted of an apparent firing mound to the west and a kidney-shaped earthen backstop mound to the east. Based on a review of a 1948 aerial photograph, there appeared to be several connecting corridors between the mounds which may have represented devegetated pathways. The earthen backstop mound still exists, and is approximately 20 feet high and 100 feet long.

### **2.6.3.3 Former Linde Gas/Chemical Storage Building Area**

The former Linde Gas Area was a 90,000-square foot area containing a hydrogen gas plant. The gas plant was used for the manufacture of hydrogen gas from natural gas. The former Linde Gas manufacturing plant was built in 1965 and was present until being replaced by the Chemical Storage Building in 1981. The exact dates of operation are unknown.

In 1981, the Chemical Storage Building was constructed as a 100 foot by 160 foot building divided into equal halves. The building was demolished in 1993. Immediately to the west of the Chemical Storage Building was a 25 foot by 35 foot building formerly known as the Control Room. The foundation of the Chemical Storage Building is a raised slab approximately 4 to 5 feet above the ground surface. The loading and unloading area was located on the south side of the Chemical Storage Building. A UST was located beneath the southern edge of the Chemical Storage Building and the former loading and unloading area. This UST was fuel oil tank of unknown size that had been used as part of Former Linde Gas operation.

In addition to the buildings, several outdoor storage areas of drums and a dumpster were observed on facility aerial photographs from approximately 1977. Two drum storage areas and one dumpster were formerly located north and west, respectively, of the former hydrogen gas plant (where the Chemical Storage Building was later constructed).

A pump dispenser island in the western portion of the area was observed on facility aerial photographs from approximately 1977. It was assumed that a UST would be located near the pump island. However, the size and contents of the UST are unknown. Presently, only the

concrete pad of the former pump dispenser island remains. It is possible that the pump island was utilized for the dispensing of the hydrogen gas.

#### **2.6.3.4 Cryogenics Area**

The Cryogenics Area included two buildings and two water storage tanks. One building was the Cryogenics Building and the other building was the Fire Pump House. The Fire Pump House was a "T"-shaped building immediately adjacent to two water storage tanks. A portion of the Fire Pump House contained an electrical generator for emergency power.

The Cryogenics Building contained two test stands, a machine shop, electric pumps and electric transformers. Specific information on the test operations for this area were not available. At a minimum, these test stands were used to conduct low-temperature tests. The Cryogenics Building was equipped with a washroom and toilet with a septic system located to the north of the building. The septic system used two septic tanks with separate leach fields. A dry well was located north-east of the building and was connected to the building's floor drains. This area was used from approximately 1957 until the buildings were demolished in 1993.

#### **2.6.3.5 Virgin Products Storage Area**

The Virgin Products Storage Area consists of six former storage yards, numbered from north to south, along with the Outside Drum Storage Area, the Quonset Hut Drum Storage Area, and the Barrel Storage Shed. The Outside Drum Storage Area was a fenced asphalt-paved area covering approximately 32,000 square feet with a small shed in the northwest corner.

The Quonset Hut Drum Storage Area included a Quonset Hut and an asphalt-paved outside drum storage area (located immediately south of the Quonset Hut). The Quonset Hut was a 40 feet by 88 feet corrugated metal building on asphalt pavement. The Quonset Hut was used for the storage of miscellaneous equipment including gasoline-driven snowblowers, lawn mowers, and yard tools. Presently, only the foundation remains. The Barrel Storage Shed was a small open-sided roofed shed. The shed was a 10 feet by 20 feet wood building used for storage.

The outside drum storage areas were used primarily for storing drums of oil products. Small quantities of flammable liquids were also stored in these areas, based on a review of facility fire-protection maps. Drums were observed on facility aerial photographs to be stored upright and stacked on their sides on asphalt pavement. Staining of the pavement and adjacent grass area was also observed on aerial photographs.

Each of the six storage yards is approximately 200 feet by 400 feet in size, and is partially paved. Based on historical information, including aerial photographs, each of the six storage areas had a different use and history. Storage Area 1 was used to store casting molds, wooden crates, various equipment, and other metal debris. Storage Area 2 was used for the storage of virgin product used in the manufacturing operations. Drums were stored upright and stacked on their sides in the past. Storage Area 3 consisted of a former outdoor storage area for drums of waste products, salvage vehicles, trays/chutes (apparently for the drying and transporting of machine parts), outdoor overhead lamp posts and fixtures. Storage Area 4 contained steel girders and frame members, “I”-beam winch supports and electric winches. Storage Area 5 contained painted steel “I”-beams and box girders. Storage Area 6 contained sealed crates.

#### **2.6.3.6 X-307 Area**

The X-307 test stand was first built in approximately 1957. This stand consisted of a test stand and a control house. In 1967, the original test stand was replaced with a larger facility consisting of a sunken building and a test stand. The building was built so it would not interfere with sound surveys conducted around the test stand. This test stand was equipped with a washroom and toilet with a septic system located to the east of the test stand.

This was a specialized outdoor test stand designed for sound surveys, limited performance testing, and crosswind testing of full-scale engines. In this area, various engine tests were conducted which required the use of jet fuels and cleaning solvents. The replacement test stand was demolished in 1993.

#### **2.6.3.7 South Klondike Undeveloped Land Area**

The undeveloped land east and south of the developed portion of the South Klondike encompasses an area of approximately 47 acres. This is a wooded area that has not been developed as part of the P&W operations conducted at the Site. P&W has not used this area for any production, testing, or ancillary activities.

#### **2.6.4 South Airport Area**

The South Airport Area is an approximately 135 acre area that generally includes the southern end of the airport to the southern most edge of the property. The South Airport Area consists of five sub-areas comprised of a total of five environmental units that are described in five USTMs. A complete listing showing the study areas, the sub-areas, the environmental units, as well as the

breakdown of the USTMs is included in Table 1. The layout of the South Airport Area is shown on Drawing 1. A brief description of the five sub-areas is provided below.

#### **2.6.4.1 Fire Training Area B**

Fire Training Area B, which was used from the early-1950s to the mid-1970s, was near the present control tower in the South Airport Area. Flammable and combustible materials were used in the fire training exercises for the airport crash response team. Overall, Fire Training Area B was an unpaved area which measured approximately 1,500 feet by 300 feet with the actual combustion area being much smaller. An earthen pit, approximately 40 feet in diameter, was filled with water prior to fire-fighting training exercises. A mock airplane fuselage is clearly visible in various aerial photographs.

#### **2.6.4.2 South Airport Fill Area**

The South Airport Fill Area is an extensive area of fill with smaller areas of fill nearby. The ground surface in this area was observed to contain various debris including asphalt, brick, concrete, and clay tile pipe. Debris was also visible along the banks of an unnamed brook on the west, and along the banks of Pewterpot Brook on the south. The source for the fill and debris is unknown.

#### **2.6.4.3 Tank Trailer Storage Area**

This area is utilized for the storage of empty box trailers and bulk liquid tank trailers. The bulk liquid tank trailers are used by P&W for the transportation of hazardous waste and fuels. Various pieces of equipment is also stored in this area, including engines in a fenced area, stands for holding engines, and miscellaneous metal equipment.

#### **2.6.4.4 Contractor Storage Area**

The Contractor Storage Area consisted of a series of small paved areas enclosed with chain-link fencing which were used as marshaling areas for various contractors doing work at the Main Street facility. Many of these areas were used to store box trailers for the storage of equipment. Relatively small quantities of fuels, paints, and cleaning fluids were stored in sheds or trailers. This area has been used since 1970 and is still being used today to a limited degree.

## 2.6.4.5 Former Storage Area

The Former Storage Area was a one-time, temporary soil stockpile area at the Main Street facility. Contaminated soil excavated during the removal of USTs was temporarily stored in an area south of Rentschler Airport. The UST removals took place between January and April 1989 with contaminated soil generated during the removal activities stockpiled for approximately six months prior to being transported off the site for disposal. The contaminated soil had been impact by virgin solvent (i.e., tetrachloroethene and trichloroethene), petroleum-based fuels and lubricating products

The Former Storage Area consisted of five stockpiles for temporary on-site storage of contaminated soil and covered an approximately 40 feet by 120 feet area. Each soil pile was located in a bermed area, lined and covered with six-millimeter polyethylene sheeting. Only two of the five piles (designated Soil Pile Nos. 1 and 2) were used for storage of soil that contained hazardous waste (i.e., U210, U220, U226, U228, and U239). However, the exact storage location of these two piles of soil containing hazardous waste within the area covered by all five soil piles is unknown. Therefore, the entire 40 foot by 120 foot temporary soil storage area, identified as the Former Storage Area, is addressed as a regulated unit under the Resource Conservation and Recovery Act (RCRA).

Presently, the Former Storage Area is vacant and surrounded by a four-foot snow fence. P&W plans to complete clean closure of the Former Storage Area prior to the sale or transfer of the property. Accordingly, P&W has conducted a soil sampling and analysis program focused on the constituents of concern and possible exposure pathways discussed in the RCRA Closure Plan to support the clean closure.

## 2.7 Previous Investigations

The Airport/Klondike Area has been the subject of specific investigations and included in site-wide investigations related to environmental conditions since the mid 1960's. These reports and other sources of information were reviewed in an attempt to consolidate the information and evaluate the coverage to determine the focus of future investigations. Other smaller reports and work in progress provided additional supporting data. A listing of reports for investigations conducted in the Airport/Klondike Area is included in the References at the end of this report.

Available information has been included in the USTMs for each of the environmental units. Much of the history of the use of these environmental units was found in the previous investigation reports. Other supporting information came from facility files or personal

communications. This information was compiled from all of the available resources and included in the USTMs. A listing of specific references utilized in preparation of the USTMs has also been included at the end of each individual USTM. These USTMs are presented in separate volumes. Generally, the history each unit is well documented. However, specific details regarding the operation of these units was not always available. Information on the review of available data was discussed previously.

In 1990, Westinghouse Environmental and Geotechnical Services, Inc. (Westinghouse) completed a Current Assessment Summary (CAS) for the Main Street facility. Subsections of this report addressed the Airport/Klondike Areas. Concurrent with the preparation of the CAS, Westinghouse also prepared a Preliminary Reconnaissance Survey of the Airport/Klondike Area. The work by Westinghouse included documentation of past uses, field reconnaissance, an electromagnetic survey, a seismic refraction survey, aquifer testing, and soil and groundwater sampling associated with soil boring and monitoring well installations.

In 1992 and 1993, Haley & Aldrich, Inc. (H&A) completed a Site-wide Environmental Monitoring Report for the Main Street facility. The work by H&A included soil and groundwater sampling associated with soil boring and monitoring well installations. Subsections of the H&A report discussed analytical results of subsurface, groundwater, surface water and sediment samples collected during the investigation activities.

Later in 1992 and 1993, Metcalf & Eddy, Inc. (M&E) completed Site Investigation Reports for the Airport/Klondike Area. The activities by (M&E) included a review of background data, a walk-through inspection, and environmental sampling. The environmental sampling included sampling and analysis of surface water, sediment, surface soil, subsurface soil, and groundwater. In these reports, the subsurface investigations focused on Fire Training Area C, the X-401 dry wells, and the X-430 Area in the North Klondike Area; the Virgin Products Storage Area (VPSA), the Cryogenics Area, and the Quonset Hut Area in the South Klondike.

In the fall of 1992, H&A conducted an Environmental Assessment at the former PCB Storage Building in the X-407 Area. The work by H&A included the collection and analysis of wipe, soil, and groundwater samples for the PCB Storage Building.

In 1994, septic systems in the Klondike Area were investigated by LEA as part of the Klondike Septic System Investigation. These septic systems included the X-410 Maintenance and Storage Building Septic System, the X-401 Locker Room Septic System, the Cryogenics Building Septic System, and the X-307 Septic System. The purpose of the investigation was to assess soil and

# DRAFT

groundwater conditions in the areas that may have been impacted as a result of the usage of the septic systems. Soil and groundwater sampling associated with soil boring and Geoprobe® screenpoint installations was conducted as part of this investigation.

## 1. UNIT-SPECIFIC TECHNICAL MEMORANDA INTRODUCTION

Unit-Specific Technical Memoranda (USTMs) that present the results of soil sampling and analysis in the vicinity of specific environmental units that were investigated, and remediated as necessary, as part of the Site investigation and remediation activities have been completed for the Airport/Klondike Area of the P&W Main Street facility. These USTMs have been prepared to aid in the identification and evaluation of sources, or potential sources, of contamination within the Airport/Klondike Area. These USTMs include pertinent background information for each of the environmental units for which a subsurface investigation, and soil remediation as necessary, was conducted. USTMs were also prepared for those units that did not warrant a subsurface investigation.

As applicable, each USTM includes the rationale for conducting any investigation activities at that location, an outline of any investigation that was performed, analytical results from the investigation, and any conclusions based on the data collected. In cases where remediation activities were conducted, each USTM also includes the rationale for conducting any remediation activities at that location, an outline of any remediation activities that were performed, the analytical results upon completion of the remediation activities, and conclusions based on the data collected.

### 1.1 Scope

The Airport/Klondike Area consists of 4 study areas that include the North and South Airport Areas and the North and South Klondike Areas. Within the 4 study areas addressed in this report, there are a total of 24 sub-areas. Within the 24 sub-areas, there are a total of 104 environmental units.

The USTMs have been prepared to provide the background and rationale for the subsurface investigations that have been conducted in the vicinity of the environmental units in the Airport/Klondike Area. The investigations conducted were designed primarily to address potential releases of chemicals to the subsurface soil within fifteen feet of the ground surface to satisfy the direct exposure criteria of the Connecticut Remediation Standard Regulation (RSR). The investigations were not intended to specifically address the occurrence of contamination in groundwater. Groundwater contamination is evaluated from a site-wide perspective due to the nature of groundwater movement and contaminant transport. However, to provide a comprehensive presentation of the available information, a summary of groundwater information is included in the USTMs.



## 1.2 Organization

Overall, the USTMs have been prepared as an integral part of the summary report prepared for the Airport/Klondike Area investigation and remediation activities. As such, the majority of information necessary for a complete understanding of the project is included in the body of the report. Presentation of the USTMs has generally been organized according to the specific area and sub-area of the Airport/Klondike Area where the environmental units are physically located. There are a total of 104 environmental units that are described in 63 USTMs. A complete listing showing the study areas, the sub-areas, the environmental units, as well as the breakdown of the USTMs is included in Table 1.

Some of the USTMs have been prepared to discuss more than one environmental unit. Such groupings have usually been due to the proximity of the units to each other and the similarity of the units. In cases where investigations activities were not warranted, all the units within a given sub-area were grouped into a single USTM. The groupings of the USTMs are shown on Table 1. Table 1 includes columns for area USTMs and individual USTMs. To indicate which type of USTM was prepared, an "X" was placed in the appropriate column. For area USTMs, the environmental units within the sub-area which were discussed in the area USTM are indicated with an "O".

The USTM presents available background information on the location, description, dates of operation, and processes or operations for a particular environmental unit (or units for area USTMs). This information was compiled from all available resources as discussed in more detail in Section 2 of the report. A listing of specific references utilized in preparation of the USTMs has also been included at the end of each USTM.

The USTM is designed to present the investigation and remediation activities that have been conducted for, or in the vicinity of, an environmental unit(s). The investigation and remediation activities that were conducted for a specific USTM are presented in chronological order. Where investigation activities were incidental to the particular unit, but in close proximity, these incidental investigation activities are also discussed.

For groundwater investigation activities that were conducted during the investigation of a particular unit, such as Geoprobe<sup>®</sup> screenpoint samples completed during soil investigations, a summary of the information is provided in the USTM as part of the chronological presentation of the investigation and remediation activities. Where the groundwater investigation activities were conducted as part of the site-wide groundwater investigations, such as a round of groundwater

sampling and analysis, a summary of the information is provided in the USTM prior to the chronological presentation of investigation and remediation activities. A more detailed account of the groundwater sampling is included in *Technical Memorandum 3, Groundwater Sampling and Quality*.

## 1.3 Conventions

In the preparation of the USTMs, certain conventions were adopted to provide consistency with the presentation of the analytical data. The conventions are as discussed below.

The analytical data for soils is presented in Tables 1, 2, and 3. The Table 1's were generated directly from the database to readily illustrate the specific analyses performed on the soil samples. A summary of the soil sampling information including sample identification, location identification, depth, type, and analyses conducted is included in Table 1. In the specific instance where a groundwater investigation, in the form of Geoprobe<sup>®</sup> screenpoint samples, was conducted concurrent with the soil sampling investigation analytical data for the groundwater samples will be presented in Tables 1, 4, and 5. In the case where a subsurface investigation was conducted for both soil and groundwater, Table 1 includes a summary of both soil and groundwater sampling information. The specific category designations noted in the table include:

- portable GC -- volatile organic compounds analyzed at a mobile laboratory (i.e., LEA Analytical Laboratory)
- Volatile Organics -- volatile organic compounds analyzed at an offsite fixed laboratory
- Semivolatile Organics -- semivolatile organic compounds
- Herbicides -- herbicides
- Pesticides -- pesticides
- PCBs -- polychlorinated biphenyls
- Metals -- analysis for one or more total metals
- Extraction -- analysis by either the synthetic precipitation leaching procedure (SPLP) or the toxicity characteristic leaching procedure (TCLP)
- Miscellaneous -- category which includes miscellaneous analyses not otherwise categorized such as cyanides, total petroleum hydrocarbons, etc.

For Table 1's, an "X" indicates that a sample was analyzed for the given analyte class with at least one constituent over the detection limit. An "x" indicates that a sample was analyzed for the given analyte class with no constituents over the detection limit.

Concentrations of all constituents detected in the soil samples collected and analyzed for the particular environmental unit(s) are presented in the Table 2 presented in a particular USTM. The concentrations of all constituents analyzed in the soil samples collected and analyzed along with the detection limits for constituents not detected are presented in Table 3. In the case where a subsurface investigation was conducted for both soil and groundwater, Tables 4 and 5 contain similar information to Tables 2 and 3, respectively, for groundwater samples.

The USTMs provide an evaluation of the soil data against the applicable default numeric criteria established pursuant to the RSR. The criteria are established in the RSR based on exposure pathways for various environmental media, including soil and groundwater. The evaluation of the soils data is based on a comparison to the residential and industrial/commercial direct exposure criteria (DEC), the GB pollutant mobility criteria (PMC) included in the RSR, as well as the site-specific background soil concentrations. For a more detailed discussion of background concentrations of metals in soils refer to *Technical Memorandum 4, Background Soil Data*.

**TABLE 2  
STORAGE TANKS**

**Airport/Klondike Area  
Pratt & Whitney Main Street Facility**

	Volume (gallons)	Description	Quantity	Type
<b>NORTH AIRPORT AREA</b>				
Silver Lane Pickle Company	Unknown	Fuels	6	UST
<b>NORTH KLONDIKE AREA</b>				
X-401 Area	275	Fuel Oil	1	AST
	275	JP-4	1	AST
X-410 Area	500	JP-5	1	AST
	275	Fuel Oil	1	AST
	500	Fuel Oil	1	AST
X-415 Area	5000	#4 Fuel Oil	1	AST
MERL Area	500	Fuel Oil	1	AST
Explosives Storage Area	500	Fuel Oil	1	UST
X-430 Area	500	Fuel	1	AST
	2000	#2 Fuel Oil	1	AST
X-407 Area	275	Fuel Oil	1	AST
	275	JP-4	2	AST
X-194 (X-448) Area	1000	#2 Fuel Oil	1	AST
X-312/X-314 Area	3000	JP-4	3	UST
	5000	JP-4	2	UST
	15000	JP-5	1	UST
<b>SOUTH KLONDIKE AREA</b>				
Tie-Down Area	3000	JP-5	1	AST
Former Linde Gas/Chemical Storage Building Area	Unknown	Fuel	2	UST
Cyrogenics	275	Diesel	1	AST
	1000	#2 Fuel Oil	1	UST
Virgin Products Storage Area	275	Fuel	1	AST

**TABLE 1**  
**ENVIRONMENTAL UNITS**

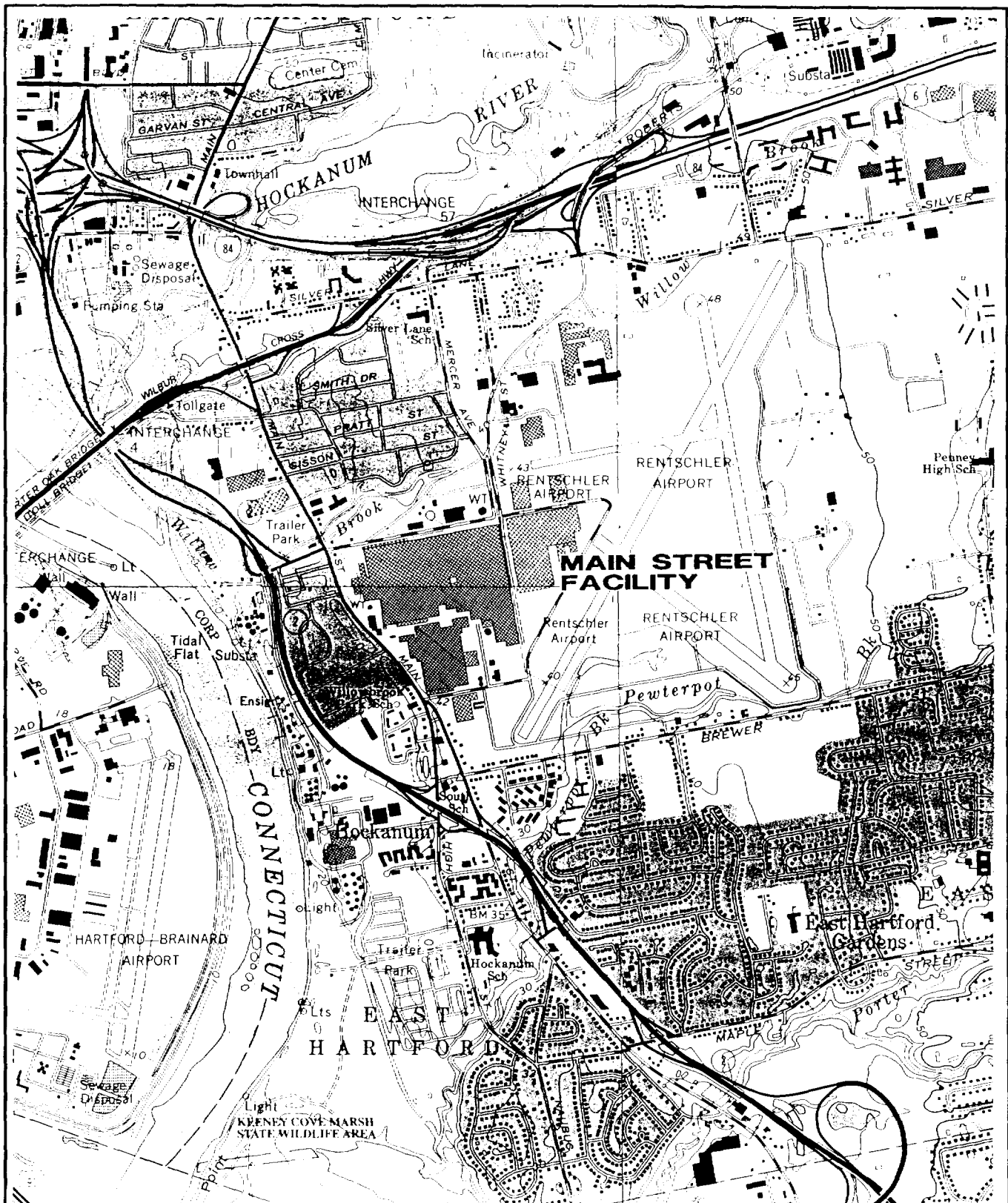
Airport/Klondike Area  
Pratt & Whitney Main Street Facility

	AREA USTM	INDIVIDUAL USTM	DATE SUBMITTED	DATE REVIEWED	DATE REVISED
<b>NORTH AIRPORT AREA</b>					
Rentschler Airport	X		3/31/98	4/9/98	4/21/98
Runway Area	O				
Former Army Barracks Septic Systems		X			
Silver Lane Pickle Company					
Underground Storage Tanks		X			
Soil Piles		X			
<b>NORTH KLONDIKE AREA</b>					
X-401 Area	X		4/2/98	4/9/98	
X-401 Test Stand	O				
X-402 Test Stand	O				
X-403 Test Stand	O				
Equipment Shed	O				
Pavilion	O				
Locker Room	O				
Fire Training Area C		X			
X-401 Drywells		X			
X-401 Locker Room Septic System		X			
X-410 Area	X		3/31/98	4/9/98	
X-442 Storage Room	O				
X-196 Control Room	O				
X-410 Test Stand	O				
X-411 Test Stand	O				
X-412 Test Stand	O				
X-411 Control Room	O				
X-411 Compressor Room	O				
Maintenance and Storage Building	O				
X-410 Drain Pipe		X			
Maintenance and Storage Septic System		X			
X-410 Oil Rack		X		4/21/98	
X-415 Area	X		4/3/98	4/9/98	
X-415 Combustion Lab	O				
X-416 Test Stand	O				
X-417 Test Stand	O				
X-419 and X-420 Test Stands	O				
X-426 and X-427 Test Stands	O				
X-449 Test Stand	O				
X-450 Test Stand	O				
X-451 Test Stand	O				
Infra-Red Lab X-450	O				
X-415 Septic System and Drywell		X			
X-415 Boiler Room AST		X			
MERL Area	X		3/31/98	4/9/98	
MERL Explosives Forming	O				
Control Room	O				
Storage Building	O				
Undesignated Building	O				
Fire Training Area D		X			
MERL Drywell		X			
Explosives Storage Area	X		4/2/98	4/9/98	
Outside Storage Area	O				
Fill Area		X			
Underground Storage Tank		X			
Explosives Storage Building		X			
Outside Chemical Storage Shed		X			
Chemical Storage Building		X			
North Klondike Undeveloped Land Area	X		4/3/98	4/9/98	
Undeveloped Land	O				
Outside Storage Area		X			
Soil Piles		X			
X-430 Area	X		3/31/98	4/9/98	
X-430 Test Stand	O				
X-431 Test Stand	O				
X-432 Test Stand	O				
X-433 Test Stand	O				
X-434 Test Stand	O				
X-435 Test Stand	O				
X-436 Test Stand	O				
Stainless Steel Tank		X			
Aboveground Storage Tank		X			
X-407 Area	X		3/31/98	4/9/98	
X-404 Test Stand	O				
X-405 Test Stand	O				

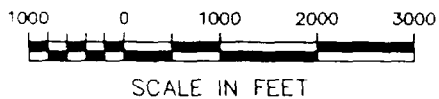
**TABLE 1  
ENVIRONMENTAL UNITS**

Airport/Klondike Area  
Pratt & Whitney Main Street Facility

	AREA USTM	INDIVIDUAL USTM	DATE SUBMITTED	DATE REVIEWED	DATE REVISED
X-406 Test Stand	O				
X-407 Test Stand	O				
X-408 Test Stand	O				
X-408 Test Rig Room	O				
X-409 Test Stand	O				
North Klondike Fire Pump House	O				
Compressor Building	O				
PCB Storage Building		X			
<b>X-194 (X-448) Area</b>	X				
X-448 Test Stand	O				
Control Room	O				
Block House	O				
Outside Storage	O				
X-194 Area	O				
Aboveground Storage Tank		X			
<b>X-312/X-314 Area</b>	X		4/2/98	4/9/98	
X-312 Test Stand	O				
X-314 Test Stand	O				
X-312 Tank Farm		X			
X-314 Septic System		X			
<b>SOUTH KLONDIKE AREA</b>					
Tie-Down Area	X		4/2/98	4/9/98	
X-309 Test Stand	O				
Fire Training Area A & B-24 Test Stand		X			
USTs and AST		X			
<b>Firing Range Area</b>					
Firing Range		X			
<b>Former Linde Gas/Chemical Storage Building Area</b>					
Former Linde Gas		X			
Linde Bldg, Fuel Oil UST, Load/Unload		X			
Drums and Dumpster Areas		X			
Former Underground Storage Tank		X			
Linde Septic System		X			
<b>Cryogenics</b>	X				
South Klondike Fire Pump House	O				
Cryogenics Building	O				
Cryogenics Drywell & Septic System		X			
Underground Storage Tank		X			
Aboveground Storage Tank		X			
		X			
<b>Virgin Products Storage Area</b>					
Storage Area 2		X			
Storage Area 3		X			
Quonset Hut/Drum Storage Area		X			
<b>X-307 Area</b>	X		4/3/98	4/9/98	
Test Stand X-307	O				
X-307 Septic System		X			
X-307 Rubble Piles		X			
<b>South Klondike Undeveloped Land Area</b>	X		4/3/98	4/9/98	
Undeveloped Land	O				
Debris Piles		X			
<b>SOUTH AIRPORT AREA</b>					
<b>Fire Training Area B</b>					
Fire Training Area B		X			
<b>Contractor Storage Area</b>					
Contractor Storage Area		X			
<b>Former Storage Area</b>					
RCRA Waste Piles		X			
<b>Tank Trailer Storage Area</b>					
Tank Trailer Storage Area		X			
<b>South Airport Fill Area</b>					
Fill Area		X			



MAP REFERENCE:  
USGS 7.5 MINUTE SERIES QUADRANGLES  
FOR HARTFORD NORTH, HARTFORD SOUTH,  
GLASTONBURY, AND MANCHESTER CONN.,  
DATED 1964 & 1963 AND REVISED 1992.



## AIRPORT/KLONDIKE AREA

SUMMARY SITE INVESTIGATION AND REMEDIATION REPORT

## PRATT & WHITNEY MAIN STREET FACILITY USGS TOPOGRAPHIC MAP

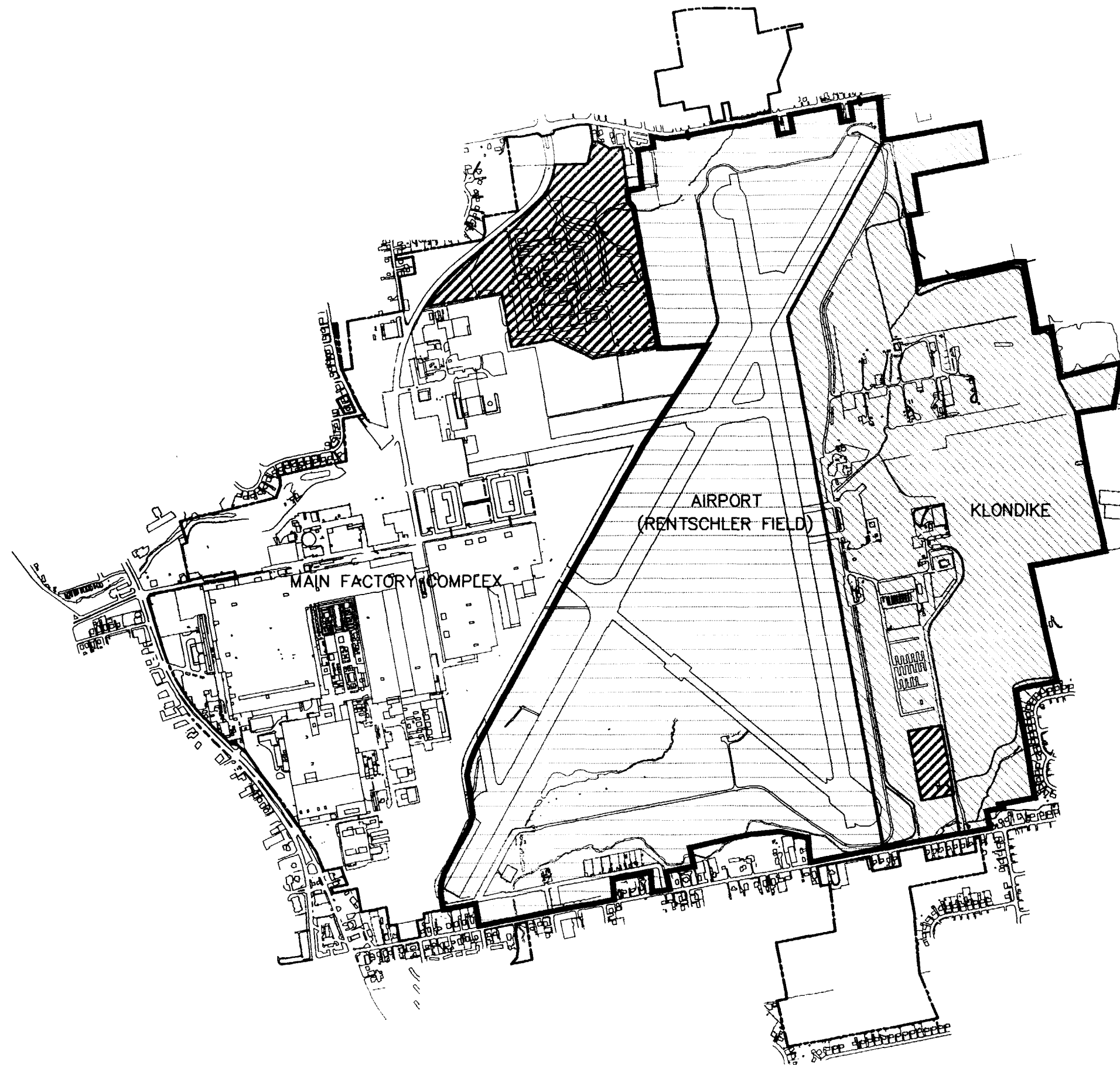
FIG. 1

Comm.No.  
68V8124



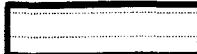




**Pratt & Whitney**  
A United Technologies Company



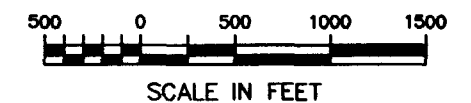


# **LEGEND**

-  Property line (Approximate location)
-  Site Area boundary (Approximate location)
-  Airport Area (Rentschler Field)
-  Klondike Area
-  Areas which are not part of the East Hartford Main Street Facility

## **MAP REFERENCE:**

SURVEY CONTROL BY FUSS & O'NEILL, INC  
 PHOTOGRAMMETRY BY GOLDEN AERIAL SURVEYS, INC  
 DATE OF PHOTOGRAPHY: 3/17/91



AIRPORT/KLONDIKE AREA SUMMARY SITE INVESTIGATION AND REMEDIATION REPORT <b>PRATT &amp; WHITNEY MAIN STREET FACILITY</b> <b>SITE PLAN</b> <b>FIG.2</b>		
Comm.No. 68V8124	 <b>Pratt &amp; Whitney</b> <small>A United Technologies Company</small>	



**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized** (in Site File)      ☐ **Oversized** (in Map Drawer)

☐ **Page(s) Missing** (Please Specify Below)

☐ **Privileged**      ☐ **Other** (Provide  
Purpose Below)

**Description of Oversized Material, if applicable:**

**DRAWING 1: SUMMARY SITE INVESTIGATION AND  
REMEDATION REPORT SITE LOCATION MAP &  
ENVIRONMENTAL UNITS**

☒ **Map**      ☐ **Photograph**      ☐ **Other** (Specify Below)

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***

**UNIT-SPECIFIC TECHNICAL MEMORANDUM: RENTSCHLER AIRPORT  
RUNWAY AREA  
PRATT & WHITNEY, EAST HARTFORD, CT**

---

**AREA:** North and South Airport

**SUB-AREA:** Rentschler Airport

**ENVIRONMENTAL UNIT:** Rentschler Airport Runway Area

**Location:** The Rentschler Airport Runway Area is located to the east of the main facility, west of the Klondike Areas, south of Silver Lane, and north of Brewer Street (Drawing 1). It does not include the following environmental units in the South Airport: Fire Training Area B, Contractor Storage Area, Former Storage Area, Tank Trailer Storage Area, and the South Airport Fill Area. It does not include the following sub-area and environmental unit in the North Airport, respectively: the Silver Lane Pickle Company and the Former Army Barracks Septic Systems. The locations of these aforementioned environmental units and sub-areas are included on Drawing 1. All of these listed areas have been investigated independently and should be referred to separately.

**Description:** The Rentschler Airport Runway Area was developed over the years and presently consists mainly of two runways, each approximately one-mile long, running north to south and northeast to southwest. Based on available drawings, there is a drainage system in the Rentschler Airport. The northern portion of the North Airport drains into Willow Brook. The rest of Rentschler Airport eventually drains into Pewterpot Brook.

**Dates of Operation:** The Rentschler Airport Runway Area was originally built in 1931, expanded over the years, and eventually closed in December 1994.

**Processes:** The Runway Area was used for the take-off and landing of a variety of commercial and military aircraft. Fueling and miscellaneous aircraft repair operations were conducted in other areas of the site. The fueling and repair operations would have been conducted at the South Klondike Tie-Down Area and the airport hangars (Drawing 1).

**Aerial Photographs:** Large-scale aerial photographs for 1965, 1970, and 1975 were obtained from Keystone Aerial Surveys Inc. A large-scale aerial photograph for 1980 was obtained from AeroGraphics Corporation. Based on these photographs, there is no evidence of any storage areas, staining, or repair areas in the Rentschler Airport Runway Area.

**Specific Contaminants of Concern:** The constituents of concern for the Rentschler Airport Runway Area are jet fuels and aviation gasoline. Analyses have been conducted for: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, beryllium, nickel, and zinc), polychlorinated biphenyls (PCBs), and total petroleum hydrocarbons (TPH). Analyses for these constituents was conducted in order to be as comprehensive as possible during the investigation activities incidental to the Runway Area.

**Potential Release Mechanism:** The most likely release mechanism in the Runway Area is potential spillage that could have affected the underlying soil and groundwater. However, the likelihood of a spill is low in this area, since fueling and miscellaneous aircraft repair operations were conducted elsewhere. The fueling and repair operations would have been conducted at the South Klondike Tie-Down Area and the airport hangars. The Tie-Down Area has been investigated independently and should be referred to separately. The hangars are located to the northwest of the Airport/Klondike Area and are not part of the Site.

## **INVESTIGATION AND REMEDIATION ACTIVITIES:**

Various historical investigations have been conducted within the Rentschler Airport Runway Area as part of investigations unrelated to the Runway Area. These incidental investigations have generated analytical data in the immediate vicinity of the Runway Area. In order to be as comprehensive as possible, presentation of this data is included below in chronological order.

These incidental investigations were conducted in December 1989, February 1990, May 1993, and August 1996. Due to the potential for a release associated with this unit resulting from the placement of impacted fill, a subsurface investigation to determine the degree and extent of soil contamination was performed in November 1997. Prior to 1989, no investigations had reportedly been performed.

Supplemental groundwater investigations have also been conducted in the Rentschler Airport Runway Area since 1990. Nine monitoring wells and ten of fifteen piezometers have been sampled in the immediate vicinity of the North and South Airport Areas. The monitoring well and piezometer locations are shown on Drawing 1.

Some low-level concentrations of VOCs have been noted for the Rentschler Airport Runway Area. VOCs detected in groundwater have included chloroform (CFM), methylene chloride (MC), methyl-tert-butyl-ether (MTBE), tetrachloroethylene (PCE), 1,1,2,2-tetrachloroethane (1122TCA), 1,1,1-trichloroethane (TCA), and toluene (TL). No VOCs were detected at concentrations greater than fifteen micrograms per liter in the groundwater samples that were analyzed. Minimal concentrations of TPH, less than one milligram per liter, were noted in the groundwater samples that have been analyzed. No detectable concentrations of SVOCs were noted in the groundwater samples that have been analyzed from the Rentschler Airport Runway Area.

Elevated concentrations of metals have been detected in three of the monitoring wells. Elevated concentrations of lead have been detected in both NA-MW-03 and NA-MW-04. Elevated concentrations of arsenic, lead, mercury, and zinc have also been detected in groundwater samples from SK-MW-08D. For a more detailed account of these sampling events refer to *Technical Memorandum 3, Groundwater Sampling and Quality*.

### **1989 through 1993 Investigations (Westinghouse and Metcalf & Eddy):**

**Description:** On December 4 and 5, 1989 an electromagnetic terrain conductivity survey was performed along the northeast-southwest runway in the Rentschler Airport Runway Area by

Westinghouse Environmental and Geotechnical Services, Inc. (Westinghouse). The seismic survey location is shown on Drawing 1 (Westinghouse, 1990). This survey was performed using a Geonics, Ltd. EM-31 terrain conductivity meter. This investigation was conducted as part of a site-wide EM-31 seismic survey conducted by Westinghouse.

Within the Rentschler Airport Area, one soil sample was collected during monitoring well installations completed by Westinghouse in 1990. A soil sample was collected at SK-MW-08S and analyzed for VOCs. This sampling location is shown on Drawing 1.

During a Metcalf & Eddy, Inc. (M&E) 1993 investigation, two soil samples were collected during the installation of monitoring SK-MW-16. These soil samples were analyzed for: VOCs, PCBs, metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, beryllium, nickel, and zinc) by mass analysis methodologies, leachable metals (chromium, lead, and nickel) by the Toxicity Characteristic Leaching Procedure (TCLP), and TPH. A summary of the samples collected and analyses performed is included in Table 1. The sampling locations are shown on Drawing 1.

**Investigation Results:** The seismic survey line along the northeast-southwest runway indicated a number of instances where the console meter deflected below "0" on the conductivity scale. This phenomenon is caused when the EM-31 passes over a highly conductive or resistive object. In all but three of the instances of "0" anomalies along the northeast-southwest runway, there was evidence of a nearby utility conduit (i.e. drainpipe, power line, or gas line) that likely caused the anomaly (Westinghouse, 1990).

Only one VOC was detected in the soil sample collected from SK-MW-08S. Concentrations of constituents detected in soil samples collected are presented in Table 2. A complete summary of soil analytical results with detection limits is presented in Table 3. Methylene chloride (MC) was detected at a concentration close to the method detection limit in this sample. No other VOCs were detected in the soil sample that was submitted for laboratory analysis.

Barium, chromium, lead, nickel, and zinc were the only metals detected in the soil samples submitted for laboratory analysis during the 1993 investigation. The reported mass concentrations of metals were similar to site-wide background mass concentrations of metals (Fuss & O'Neill, 1994). For a more detailed discussion of background concentrations of metals in soils refer to *Technical Memorandum 4, Background Soil Data*. No VOCs, PCBs, or TPH were detected in the soil samples submitted during this investigation. Concentrations of constituents detected in soil samples collected are presented in Table 2. A complete summary of soil analytical results with detection limits is presented in Table 3.

**Data Evaluation and Conclusions:** With regards to the 1989 seismic survey conducted along the northeast-southwest runway the three unknown anomalies may have been caused by conduits with no visible surface expression (Westinghouse, 1990).

The analytical data generated from the incidental historical investigations conducted in 1990 and 1993 indicated that minimal future investigations were warranted in the Rentschler Runway Area due to the lack of significant contaminant detects in the soil samples that were analyzed.

### **1996 Investigation (Loureiro Engineering Associates):**

**Description:** During a Loureiro Engineering Associates, P.C. (LEA) 1996 investigation, soil samples were collected during the installation of SK-MW-23. Installation of this monitoring well and the collection of the soil samples were incidental activities in regards to the Rentschler Airport Runway Area. Soil samples were collected in continuous two-foot intervals to a depth of sixteen feet. A total of eight soil samples were submitted to the LEA Analytical Laboratory and screened for the presence of target VOCs (benzene (BZ), ethylbenzene (EBZ), tetrachloroethylene (PCE), toluene (TL), 1,1,1-trichloroethane (TCA), trichloroethylene (TCE), and xylenes (XYL)).

Based on visual, olfactory, or instrument evidence, two samples were submitted to Averill Environmental Laboratory, Inc. (AEL) for analysis. These soil samples were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, metals (arsenic, barium, cadmium, chromium, lead, mercury, nickel, selenium, silver, and zinc) by mass analysis methodologies, and TPH by EPA Method 418.1. A summary of the samples collected and analyses performed is included in Table 1. The sampling location is shown on Drawing 1.

**Investigation Results:** Concentrations of constituents detected in soil samples are presented in Table 2. A complete summary of soil analytical results with detection limits is presented in Table 3. Target VOCs were not detected in any of the soil samples submitted to the LEA Analytical Laboratory. Of the two soil samples submitted to AEL, acetone (ACT) was the only VOC detected. ACT was detected in the soil sample from the 2 to 4 foot sample interval.

There were various metals detected in both of the soil samples analyzed by mass analysis methodologies. The various metals detected by mass analysis methodologies were barium, chromium, and zinc. No SVOCs, PCBs, or TPH were detected in the two soil samples that were submitted to AEL for laboratory analysis.

**Data Evaluation and Conclusions:** ACT is a common laboratory contaminant and is not necessarily indicative of a release from this unit. The concentrations of the metals detected in the soil samples are typical of site-wide background concentrations of metals (Fuss & O'Neill, 1994), and are not indicative of a release from this unit. For a more detailed discussion of background concentrations of metals in soils refer to *Technical Memorandum 4, Background Soil Data*.

The incidental analytical data generated from the 1996 LEA monitoring well installation activities indicated that minimal future investigations were warranted in the Rentschler Airport Runway Area due to the lack of significant contaminants detected in the soil samples that were analyzed.

### **November 1997 Investigation (LEA):**

**Description:** During airport expansion activities conducted at various times, fill was placed in low-lying areas of the North Airport. In order to investigate the potential for contaminated fill used in these low-lying areas, thirty-nine Geoprobe® soil borings, NA-SB-63 through NA-SB-101, were advanced to a depth of four feet in suspected low-lying portions of the North Airport.

These low-lying areas were primarily identified from historical aerial photographs. The sampling locations are shown on Drawing 1.

During the completion of these borings, soil samples were collected for visual inspection. When visual or instrument evidence indicated potential contamination, samples would be collected in two-foot intervals to a depth of sixteen feet or to the clay layer, which ever came first. Samples would then be screened for target VOCs in the LEA Analytical Laboratory and at least one sample per boring would have been submitted for laboratory analysis of VOCs, PCBs, SVOCs, TPH, and metals, in order to be as comprehensive as possible in the investigation that was conducted.

**Investigation Results:** Based on visual and instrument evidence, contaminated fill was not encountered during this investigation. Therefore, no samples were collected for subsequent laboratory analysis.

**Data Evaluation and Conclusions:** No further investigation is warranted in the Rentschler Airport Runway Area due to the low likelihood of a release, laboratory analyses from incidental investigations, and the lack of visual and instrument evidence, indicating that jet fuel or aviation gasoline contamination is not present.

Furthermore, the network of groundwater sampling locations, as shown on Drawing 1, located in the Rentschler Airport Runway Area provides groundwater analytical data on the lack of jet fuel or aviation gasoline impacts to groundwater.

#### **References:**

Caldwell, Arthur, 1964, *Report on Jacking 30-inch Diameter Casings Under Runways at Rentschler Field*, prepared for Pratt & Whitney Aircraft, East Hartford, CT.

Connecticut Department of Environmental Protection. 1993. *Map of Water Quality Designations for the Upper Connecticut River Basin*.

Factory Insurance Association, 1956, *Plan of United Aircraft Corporation, United Airports Division*, East Hartford, CT.

Fuss & O'Neill, Inc. 1991, *Environmental Screening Investigations - UTC Hangars*, prepared for United Technologies, Rentschler Airport, East Hartford, CT.

Fuss & O'Neill, Inc. 1994, *Soil Sampling Background Areas – North Klondike*, prepared for Pratt & Whitney.

Fuss & O'Neill, Inc., May 1991, *Work Plan, Site-Wide Environmental Monitoring Program*, Pratt & Whitney, unpublished draft report prepared for Pratt & Whitney.

Haley & Aldrich, Inc., 1993, *Site-Wide Environmental Monitoring Report, Pratt & Whitney, East Hartford, Connecticut*, prepared for Pratt & Whitney.

Keystone Aerial Surveys, Inc. 1965, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Keystone Aerial Surveys, Inc. 1970, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Keystone Aerial Surveys, Inc. 1975, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Loureiro Engineering Associates, August 18, 1995, *Rentschler Airport and Klondike Areas Data Gap Investigation and Work Plan*. Pratt & Whitney, 400 Main Street, East Hartford, CT.

Loureiro Engineering Associates, October 1995, *Rentschler Airport and Klondike Areas Data Gap Investigation and Work Plan*, United Technologies Corporation, Pratt & Whitney, 400 Main Street, East Hartford, CT.

Metcalf & Eddy, Inc. July 1993, *Draft Report - Klondike Area Site Investigation*, UTC / Pratt & Whitney Facility, East Hartford, CT, prepared for Pratt & Whitney.

P&W Aircraft Group, 1979, *Standard Procedure: Procurement and Control of Jet Fuels*, United Technologies Division.

P&W Aircraft Group, 1981, *Standard Procedure: Control of Government Furnished Fuel*, United Technologies Division.

P&W Plant Engineering Department, 1987, *Map of Layout of Areas, Roadways, & Departments Tie-Down*, East Hartford CT.

The Austin Company, 1946, *Drainage Plan of Rentschler Field*, prepared for Pratt & Whitney Aircraft Division.

Westinghouse Environmental and Geotechnical Services, Inc. 1990, *Report of EM-31 Survey*, prepared for United Technologies East Hartford Facility, East Hartford, CT.

Westinghouse Environmental and Geotechnical Services, Inc. November 1990, *Current Assessment Summary Report*, Pratt & Whitney, East Hartford, Connecticut, unpublished report for Pratt & Whitney.

## TABLES



**Table 1**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 1 of 1

Page 1 of 1

Sample Information						Analysis Information								
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Extraction	Miscellaneous
SK-MW-08S	CAS10090	2/16/90	9.0		SB		X							
SK-MW-16	02165051393	5/13/93			SB		x							
SK-MW-16	02169051393	5/13/93			SB						x	X	x	X
SK-MW-23	1017651	8/26/96	0	2	SB	x								
SK-MW-23	1017652	8/26/96	2	4	SB	x	X	x			x	X		x
SK-MW-23	1017653	8/26/96	4	6	SB	x								
SK-MW-23	1017654	8/26/96	6	8	SB	x	x	x			x	X		x
SK-MW-23	1017655	8/26/96	8	10	SB	x								
SK-MW-23	1017656	8/26/96	10	12	SB	x								
SK-MW-23	1017657	8/26/96	12	14	SB	x								
SK-MW-23	1017658	8/26/96	14	16	SB	x								

Notes: 1. Legend: X - Analysed; at least one analyte over the detection limit; x - Analysed, no analytes in group over the detection limit

2. Printed on 04/20/98

**LEA**

### Table 2

Page 1 of 1

[illegible]

Notes: 1. Only Detects Shown  
2. Printed on 04/20/98

LEA

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 1 of 12

	Location ID	SK-MW-08S	SK-MW-16	SK-MW-16	SK-MW-16	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	CAS10090	02165051393	02169051393	02169051393	1017651	1017652	1017652
	Sample Date	02/16/1990	05/13/1993	05/13/1993	05/13/1993	08/26/1996	08/26/1996	08/26/1996
	Sample Time					10:20	10:30	10:30
	Sample Depth	9.0'				0' - 2'	2' - 4'	2' - 4'
	Laboratory	NETA	ENS	ENS	ENS	LEA	AEL	LEA
	Lab. Number	NETA09014	0286960001SA	0286960002SA	0290040017SA	96-4231-183	AEL96009661	96-4232-184
Constituent	Units							
Date Metals Analyzed	-			05/26/1993			09/05/1996	
Date Organics Analyzed	-		05/24/1993			08/28/1996	09/05/1996	08/28/1996
Date PCBs Analyzed	-			05/24/1993			09/16/1996	
Date Semi-volatile Organics Analyzed	-						09/27/1996	
Date of Metals TCLP Analysis	-				06/17/1993			
Arsenic	mg/kg			<0.59			<1.11	
Barium	mg/kg			13.8			20.4	
Beryllium	mg/kg			<0.23				
Cadmium	mg/kg			<0.59			<3.32	
Chromium	mg/kg						8.97	
Chromium (Total)	mg/kg			5.6				
Chromium (Total) (TCLP)	mg/l				<0.010			
Lead	mg/kg			2.5			<22.1	
Lead (TCLP)	mg/l				<0.050			
Mercury	mg/kg			<0.12			<0.221	
Nickel	mg/kg			6.4			<11.1	
Nickel (TCLP)	mg/l				<0.040			
Selenium	mg/kg			<0.59			<1.11	
Silver	mg/kg			<1.2			<5.53	
Zinc	mg/kg			12.0			19.3	
PCB 1016	µg/kg			<9.7			<220	
PCB 1221	µg/kg			<9.7			<220	
PCB 1232	µg/kg			<9.7			<220	
PCB 1242	µg/kg			<9.7			<220	
PCB 1248	µg/kg			<9.7			<220	
PCB 1254	µg/kg			<9.7			<220	
PCB 1260	µg/kg			<9.7			<220	
Corrosivity	units			6.9				

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 2 of 12

	Location ID	SK-MW-08S	SK-MW-16	SK-MW-16	SK-MW-16	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	CAS10090	02165051393	02169051393	02169051393	1017651	1017652	1017652
	Sample Date	02/16/1990	05/13/1993	05/13/1993	05/13/1993	08/26/1996	08/26/1996	08/26/1996
	Sample Time	:				10:20	10:30	10:30
	Sample Depth	9.0'				0' - 2'	2' - 4'	2' - 4'
	Laboratory	NETA	ENS	ENS	ENS	LEA	AEL	LEA
	Lab. Number	NETA09014	0286960001SA	0286960002SA	0290040017SA	96-4231-183	AEL96009661	96-4232-184
Constituent	Units							
Cyanide (Reactive)	mg/kg			<0.12				
Ignitability	deg f			<ND				
Sulfide (Reactive)	mg/kg			<1.2				
Total Petroleum Hydrocarbons	mg/kg			<23			<38.3	
Acenaphthene	µg/kg						<380	
Acenaphthylene	µg/kg						<380	
Anthracene	µg/kg						<380	
Benzidine	µg/kg						<380	
Benzo[a]anthracene	µg/kg						<380	
Benzo[a]pyrene	µg/kg						<380	
Benzo[b]fluoranthene	µg/kg						<380	
Benzo[ghi]perylene	µg/kg						<380	
Benzo[k]fluoranthene	µg/kg						<380	
Bis(2-chloroethoxy)methane	µg/kg						<380	
Bis(2-chloroethyl) Ether	µg/kg						<380	
Bis(2-ethylhexyl)phthalate	µg/kg						<380	
Bromophenyl Phenyl Ether.4-	µg/kg						<380	
Butyl Benzyl Phthalate	µg/kg						<380	
Chloronaphthalene,2-	µg/kg						<380	
Chlorophenol,2-	µg/kg						<380	
Chlorophenyl Phenyl Ether,4-	µg/kg						<380	
Chrysene	µg/kg						<380	
Di-n-butyl Phthalate	µg/kg						<380	
Di-n-octyl Phthalate	µg/kg						<380	
Dibenzo[a,h]anthracene	µg/kg						<380	
Dichlorobenzidine,3,3'-	µg/kg						<380	
Dichlorophenol,2,4-	µg/kg						<380	
Diethyl Phthalate	µg/kg						<380	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 3 of 12

	Location ID	SK-MW-08S	SK-MW-16	SK-MW-16	SK-MW-16	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	CAS10090	02165051393	02169051393	02169051393	1017651	1017652	1017652
	Sample Date	02/16/1990	05/13/1993	05/13/1993	05/13/1993	08/26/1996	08/26/1996	08/26/1996
	Sample Time	:				10:20	10:30	10:30
	Sample Depth	9.0'				0' - 2'	2' - 4'	2' - 4'
	Laboratory	NETA	ENS	ENS	ENS	LEA	AEL	LEA
	Lab. Number	NETA09014	0286960001SA	0286960002SA	0290040017SA	96-4231-183	AEL96009661	96-4232-184
Constituent	Units							
Dimethyl Phthalate	µg/kg						<380	
Dimethylphenol, 2,4-	µg/kg						<380	
Dinitro-o-cresol, 4,6-	µg/kg						<380	
Dinitrophenol, 2,4-	µg/kg						<380	
Dinitrotoluene, 2,4-	µg/kg						<380	
Dinitrotoluene, 2,6-	µg/kg						<380	
Diphenylhydrazine, 1,2-	µg/kg						<380	
Fluoranthene	µg/kg						<380	
Fluorene	µg/kg						<380	
Hexachlorobenzene	µg/kg						<380	
Hexachlorobutadiene	µg/kg						<380	
Hexachlorocyclopentadiene	µg/kg						<380	
Hexachloroethane	µg/kg						<380	
Indeno(1,2,3-cd)pyrene	µg/kg						<380	
Isophorone	µg/kg						<380	
N-nitroso-n-propylamine	µg/kg						<380	
N-nitrosodimethylamine	µg/kg						<380	
N-nitrosodiphenylamine	µg/kg						<380	
Naphthalene	µg/kg						<380	
Nitrobenzene	µg/kg						<380	
Nitrophenol, 2-	µg/kg						<380	
Nitrophenol, 4-	µg/kg						<380	
Pentachlorophenol	µg/kg						<380	
Phenanthrene	µg/kg						<380	
Phenol	µg/kg						<380	
Propane), 2,2'-oxybis(2-chloro-	µg/kg						<380	
Pyrene	µg/kg						<380	
Trichlorobenzene, 1,2,4-	µg/kg						<380	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 4 of 12

	Location ID	SK-MW-08S	SK-MW-16	SK-MW-16	SK-MW-16	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	CAS10090	02165051393	02169051393	02169051393	1017651	1017652	1017652
	Sample Date	02/16/1990	05/13/1993	05/13/1993	05/13/1993	08/26/1996	08/26/1996	08/26/1996
	Sample Time	:				10:20	10:30	10:30
	Sample Depth	9.0'				0' - 2'	2' - 4'	2' - 4'
	Laboratory	NETA	ENS	ENS	ENS	LEA	AEL	LEA
	Lab. Number	NETA09014	0286960001SA	0286960002SA	0290040017SA	96-4231-183	AEL96009661	96-4232-184
Constituent	Units							
Trichlorophenol,2,4,6-	µg/kg						<380	
Acetone	µg/kg						150	
Acrolein	µg/kg						<18	
Acrylonitrile	µg/kg						<18	
Benzene	µg/kg	<5	<51				<7.1	
Benzene (mobile)	µg/kg					<8		<7
Bromobenzene	µg/kg						<7.1	
Bromoform	µg/kg	<5	<510				<7.1	
Carbon Disulfide	µg/kg	<5					<7.1	
Carbon Tetrachloride	µg/kg	<5	<51				<7.1	
Chlorobenzene	µg/kg	<5	<200				<7.1	
Chlorodibromomethane	µg/kg	<5	<100				<7.1	
Chloroethane	µg/kg	<5	<510				<7.1	
Chloroethyl Vinyl Ether,2-	µg/kg						<7.1	
Chloroform	µg/kg	<5	<51				<7.1	
Chlorotoluene,o-	µg/kg						<7.1	
Chlorotoluene,p-	µg/kg						<7.1	
Dibromomethane	µg/kg						<7.1	
Dichlorobenzene,1,2-	µg/kg		<51				<7.1	
Dichlorobenzene,1,3-	µg/kg		<51				<7.1	
Dichlorobenzene,1,4-	µg/kg		<51				<7.1	
Dichlorobromomethane	µg/kg	<5	<100				<7.1	
Dichlorodifluoromethane	µg/kg						<7.1	
Dichloroethane,1,1-	µg/kg	<5	<51				<7.1	
Dichloroethane,1,2-	µg/kg	<5	<100				<7.1	
Dichloroethylene,1,1-	µg/kg	<5	<51				<7.1	
Dichloroethylene,1,2-	µg/kg		<51					
Dichloroethylene,1,2-cis-	µg/kg						<7.1	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 5 of 12

	Location ID	SK-MW-08S	SK-MW-16	SK-MW-16	SK-MW-16	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	CAS10090	02165051393	02169051393	02169051393	1017651	1017652	1017652
	Sample Date	02/16/1990	05/13/1993	05/13/1993	05/13/1993	08/26/1996	08/26/1996	08/26/1996
	Sample Time	:				10:20	10:30	10:30
	Sample Depth	9.0'				0' - 2'	2' - 4'	2' - 4'
	Laboratory	NETA	ENS	ENS	ENS	LEA	AEL	LEA
	Lab. Number	NETA09014	0286960001SA	0286960002SA	0290040017SA	96-4231-183	AEL96009661	96-4232-184
Constituent	Units							
Dichloroethylene, 1,2-trans-	µg/kg	<5					<7.1	
Dichloropropane, 1,2-	µg/kg	<5	<100				<7.1	
Dichloropropylene, 1,3-cis-	µg/kg	<5	<200				<7.1	
Dichloropropylene, 1,3-trans-	µg/kg	<5	<100				<7.1	
Ethylbenzene	µg/kg	<5	<51				<7.1	
Ethylbenzene (mobile)	µg/kg					<17		<15
Ethylene Dibromide	µg/kg		<200					
Hexanone, 2-	µg/kg	<5					<18	
Methyl Bromide	µg/kg	<5	<510				<7.1	
Methyl Chloride	µg/kg	<5	<510				<7.1	
Methyl Ethyl Ketone	µg/kg	<5					<18	
Methyl-2-pentanone, 4-	µg/kg	<5					<18	
Methyl-tert-butyl Ether	µg/kg						<7.1	
Methylene Chloride	µg/kg	10	<510				<8.9	
Styrene	µg/kg	<5					<7.1	
Tetrachloroethane, 1,1,1,2-	µg/kg						<7.1	
Tetrachloroethane, 1,1,2,2-	µg/kg	<5	<100				<7.1	
Tetrachloroethylene	µg/kg	<5	<51				<7.1	
Tetrachloroethylene (mobile)	µg/kg					<21		<19
Toluene	µg/kg	<5	<51				<7.1	
Toluene (mobile)	µg/kg					<12		10
Trichloro-1,2,2-trifluoroethane, 1,1,2-	µg/kg		<100					
Trichloroethane, 1,1,1-	µg/kg	<5	<51				<7.1	
Trichloroethane, 1,1,1- (mobile)	µg/kg					<211		<185
Trichloroethane, 1,1,2-	µg/kg	<5	<100				<7.1	
Trichloroethylene	µg/kg	<5	<51				<7.1	
Trichloroethylene (mobile)	µg/kg					<21		<18
Trichloromonofluoromethane	µg/kg						<7.1	

Notes: 1. Printed on 04/20/98

**LEA**

### Table 3

Page 6 of 12

[illegible]

Notes: 1. Printed on 04/20/98

LEA



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 7 of 12

	Location ID	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	1017653	1017654	1017654	1017655	1017656	1017657	1017658
	Sample Date	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996
	Sample Time	10:50	10:55	10:55	11:00	11:10	11:15	11:20
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 16'
	Laboratory	LEA	AEL	LEA	LEA	LEA	LEA	LEA
	Lab. Number	96-4233-186	AEL96009662	96-4234-187	96-4235-188	96-4236-189	96-4237-190	96-4238-191
Constituent	Units							
Date Metals Analyzed	-		09/05/1996					
Date Organics Analyzed	-	08/28/1996	09/05/1996	08/28/1996	08/28/1996	08/28/1996	08/28/1996	08/28/1996
Date PCBs Analyzed	-		09/16/1996					
Date Semi-volatile Organics Analyzed	-		09/27/1996					
Date of Metals TCLP Analysis	-							
Arsenic	mg/kg		<1.23					
Barium	mg/kg		13.6					
Beryllium	mg/kg							
Cadmium	mg/kg		<3.7					
Chromium	mg/kg		<6.16					
Chromium (Total)	mg/kg							
Chromium (Total) (TCLP)	mg/l							
Lead	mg/kg		<24.7					
Lead (TCLP)	mg/l							
Mercury	mg/kg		<0.247					
Nickel	mg/kg		<12.3					
Nickel (TCLP)	mg/l							
Selenium	mg/kg		<1.23					
Silver	mg/kg		<6.16					
Zinc	mg/kg		12.8					
PCB 1016	µg/kg		<240					
PCB 1221	µg/kg		<240					
PCB 1232	µg/kg		<240					
PCB 1242	µg/kg		<240					
PCB 1248	µg/kg		<240					
PCB 1254	µg/kg		<240					
PCB 1260	µg/kg		<240					
Corrosivity	units							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 8 of 12

	Location ID	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	1017653	1017654	1017654	1017655	1017656	1017657	1017658
	Sample Date	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996
	Sample Time	10:50	10:55	10:55	11:00	11:10	11:15	11:20
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 16'
	Laboratory	LEA	AEL	LEA	LEA	LEA	LEA	LEA
	Lab. Number	96-4233-186	AEL96009662	96-4234-187	96-4235-188	96-4236-189	96-4237-190	96-4238-191
Constituent	Units							
Cyanide (Reactive)	mg/kg							
Ignitability	deg f							
Sulfide (Reactive)	mg/kg							
Total Petroleum Hydrocarbons	mg/kg		<42.0					
Acenaphthene	µg/kg		<410					
Acenaphthylene	µg/kg		<410					
Anthracene	µg/kg		<410					
Benzidine	µg/kg		<410					
Benzo[a]anthracene	µg/kg		<410					
Benzo[a]pyrene	µg/kg		<410					
Benzo[b]fluoranthene	µg/kg		<410					
Benzo[ghi]perylene	µg/kg		<410					
Benzo[k]fluoranthene	µg/kg		<410					
Bis(2-chloroethoxy)methane	µg/kg		<410					
Bis(2-chloroethyl) Ether	µg/kg		<410					
Bis(2-ethylhexyl)phthalate	µg/kg		<410					
Bromophenyl Phenyl Ether, 4-	µg/kg		<410					
Butyl Benzyl Phthalate	µg/kg		<410					
Chloronaphthalene, 2-	µg/kg		<410					
Chlorophenol, 2-	µg/kg		<410					
Chlorophenyl Phenyl Ether, 4-	µg/kg		<410					
Chrysene	µg/kg		<410					
Di-n-butyl Phthalate	µg/kg		<410					
Di-n-octyl Phthalate	µg/kg		<410					
Dibenzo[a,h]anthracene	µg/kg		<410					
Dichlorobenzidine, 3,3'-	µg/kg		<410					
Dichlorophenol, 2,4-	µg/kg		<410					
Diethyl Phthalate	µg/kg		<410					

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 9 of 12

	Location ID	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	1017653	1017654	1017654	1017655	1017656	1017657	1017658
	Sample Date	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996
	Sample Time	10:50	10:55	10:55	11:00	11:10	11:15	11:20
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 16'
	Laboratory	LEA	AEL	LEA	LEA	LEA	LEA	LEA
	Lab. Number	96-4233-186	AEL96009662	96-4234-187	96-4235-188	96-4236-189	96-4237-190	96-4238-191
Constituent	Units							
Dimethyl Phthalate	µg/kg		<410					
Dimethylphenol,2,4-	µg/kg		<410					
Dinitro-o-cresol,4,6-	µg/kg		<410					
Dinitrophenol,2,4-	µg/kg		<410					
Dinitrotoluene,2,4-	µg/kg		<410					
Dinitrotoluene,2,6-	µg/kg		<410					
Diphenylhydrazine,1,2-	µg/kg		<410					
Fluoranthene	µg/kg		<410					
Fluorene	µg/kg		<410					
Hexachlorobenzene	µg/kg		<410					
Hexachlorobutadiene	µg/kg		<410					
Hexachlorocyclopentadiene	µg/kg		<410					
Hexachloroethane	µg/kg		<410					
Indeno(1,2,3-cd)pyrene	µg/kg		<410					
Isophorone	µg/kg		<410					
N-nitroso-n-propylamine	µg/kg		<410					
N-nitrosodimethylamine	µg/kg		<410					
N-nitrosodiphenylamine	µg/kg		<410					
Naphthalene	µg/kg		<410					
Nitrobenzene	µg/kg		<410					
Nitrophenol,2-	µg/kg		<410					
Nitrophenol,4-	µg/kg		<410					
Pentachlorophenol	µg/kg		<410					
Phenanthrene	µg/kg		<410					
Phenol	µg/kg		<410					
Propane),2,2'-oxybis(2-chloro-	µg/kg		<410					
Pyrene	µg/kg		<410					
Trichlorobenzene,1,2,4-	µg/kg		<410					

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 10 of 12

	Location ID	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	1017653	1017654	1017654	1017655	1017656	1017657	1017658
	Sample Date	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996
	Sample Time	10:50	10:55	10:55	11:00	11:10	11:15	11:20
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 16'
	Laboratory	LEA	AEL	LEA	LEA	LEA	LEA	LEA
	Lab. Number	96-4233-186	AEL96009662	96-4234-187	96-4235-188	96-4236-189	96-4237-190	96-4238-191
Constituent	Units							
Trichlorophenol,2,4,6-	µg/kg		<410					
Acetone	µg/kg		<29					
Acrolein	µg/kg		<15					
Acrylonitrile	µg/kg		<15					
Benzene	µg/kg		<5.8					
Benzene (mobile)	µg/kg	<7		<8	<8	<7	<8	<8
Bromobenzene	µg/kg		<5.8					
Bromoform	µg/kg		<5.8					
Carbon Disulfide	µg/kg		<5.8					
Carbon Tetrachloride	µg/kg		<5.8					
Chlorobenzene	µg/kg		<5.8					
Chlorodibromomethane	µg/kg		<5.8					
Chloroethane	µg/kg		<5.8					
Chloroethyl Vinyl Ether,2-	µg/kg		<5.8					
Chloroform	µg/kg		<5.8					
Chlorotoluene,o-	µg/kg		<5.8					
Chlorotoluene,p-	µg/kg		<5.8					
Dibromomethane	µg/kg		<5.8					
Dichlorobenzene,1,2-	µg/kg		<5.8					
Dichlorobenzene,1,3-	µg/kg		<5.8					
Dichlorobenzene,1,4-	µg/kg		<5.8					
Dichlorobromomethane	µg/kg		<5.8					
Dichlorodifluoromethane	µg/kg		<5.8					
Dichloroethane,1,1-	µg/kg		<5.8					
Dichloroethane,1,2-	µg/kg		<5.8					
Dichloroethylene,1,1-	µg/kg		<5.8					
Dichloroethylene,1,2-	µg/kg							
Dichloroethylene,1,2-cis-	µg/kg		<5.8					

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Page 11 of 12

	Location ID	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23	SK-MW-23
	Sample ID	1017653	1017654	1017654	1017655	1017656	1017657	1017658
	Sample Date	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996	08/26/1996
	Sample Time	10:50	10:55	10:55	11:00	11:10	11:15	11:20
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 16'
	Laboratory	LEA	AEL	LEA	LEA	LEA	LEA	LEA
	Lab. Number	96-4233-186	AEL96009662	96-4234-187	96-4235-188	96-4236-189	96-4237-190	96-4238-191
Constituent	Units							
Dichloroethylene, 1,2-trans-	µg/kg		<5.8					
Dichloropropane, 1,2-	µg/kg		<5.8					
Dichloropropylene, 1,3-cis-	µg/kg		<5.8					
Dichloropropylene, 1,3-trans-	µg/kg		<5.8					
Ethylbenzene	µg/kg		<5.8					
Ethylbenzene (mobile)	µg/kg	<15		<18	<18	<15	<17	<18
Ethylene Dibromide	µg/kg							
Hexanone, 2-	µg/kg		<15					
Methyl Bromide	µg/kg		<5.8					
Methyl Chloride	µg/kg		<5.8					
Methyl Ethyl Ketone	µg/kg		<15					
Methyl-2-pentanone, 4-	µg/kg		<15					
Methyl-tert-butyl Ether	µg/kg		<5.8					
Methylene Chloride	µg/kg		<10					
Styrene	µg/kg		<5.8					
Tetrachloroethane, 1,1,1,2-	µg/kg		<5.8					
Tetrachloroethane, 1,1,2,2-	µg/kg		<5.8					
Tetrachloroethylene	µg/kg		<5.8					
Tetrachloroethylene (mobile)	µg/kg	<19		<22	<23	<18	<21	<23
Toluene	µg/kg		<5.8					
Toluene (mobile)	µg/kg	<10		<13	<13	<10	<12	<13
Trichloro-1,2,2-trifluoroethane, 1,1,2-	µg/kg							
Trichloroethane, 1,1,1-	µg/kg		<5.8					
Trichloroethane, 1,1,1- (mobile)	µg/kg	<185		<224	<229	<182	<211	<229
Trichloroethane, 1,1,2-	µg/kg		<5.8					
Trichloroethylene	µg/kg		<5.8					
Trichloroethylene (mobile)	µg/kg	<18		<22	<23	<18	<21	<23
Trichloromonofluoromethane	µg/kg		<5.8					

Notes: 1. Printed on 04/20/98

**LEA**

Page 12 of 12

Notes: 1. Printed on 04/20/98

## **DRAWINGS**

**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**      ☐ **Other (Provide Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 1: SOIL INVESTIGATIONS RENTSCHLER  
AIRPORT SUB-AREA LOCATION & CONSTITUENTS  
DETECTED MAP**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

\_\_\_\_\_  
\_\_\_\_\_

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***



**UNIT-SPECIFIC TECHNICAL MEMORANDUM: FORMER OIL STORAGE  
RACK  
PRATT & WHITNEY, EAST HARTFORD, CT**

---

**AREA:** North Klondike

**SUB-AREA:** X-410

**ENVIRONMENTAL UNIT:** Former Oil Storage Rack

**Location:** North Klondike Area; second road south on North Access Road from Perimeter Road (Drawing 1). A former oil storage rack was located northwest of the Maintenance and Storage Building near the edge of the paved area.

**Description:** A former oil storage rack consisted of an approximately 30-foot long by 10-foot wide area as identified on available mapping (Pratt & Whitney (P&W) Plant Engineering, 1976). Information on the material of construction for the base beneath the oil storage rack was unavailable. Presently, only six inches of trap-rock gravel mixed with soil is present in the area where this unit was shown on the map.

**Dates of Operation:** Pre-1965 to Post-1983.

**Processes:** Storage of oil in containers on an outdoor rack.

**Aerial Photographs:** Large-scale aerial photographs for 1965, 1970, and 1975 were obtained from Keystone Aerial Surveys, Inc. Three smaller aerial photos from 1977, 1983, and 1987 were obtained from the P&W Photographic Services Department.

Except for the smaller 1983 and 1987 photographs, all of the photographs portray the oil storage rack as an area used to store drums and other miscellaneous containers.. The 1983 and 1987 photographs show that the oil rack had been removed and that this area was no longer in use for storage. At the times of the 1983 and 1987 photographs, small vegetative under-growth predominated the former oil storage rack area.

**Specific Contaminants of Concern:** Oil is the primary contaminant of concern. In order to be as comprehensive as possible in the investigation that was conducted, the following constituent groups were analyzed for: volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, metals, nickel and zinc), and total petroleum hydrocarbons (TPH).

**Potential Release Mechanism:** Impacts to soils and groundwater due to potential leaks or spills associated with the oil storage rack.

## **INVESTIGATION AND REMEDIATION ACTIVITIES:**

Due to the potential for a release associated with the former oil storage rack, a subsurface investigation to determine the degree and extent of soil contamination was performed in March 1997 and May 1997. Prior to 1997, no investigation of this unit had reportedly been performed.

### **March 1997 Investigation (Loureiro Engineering Associates):**

**Description:** On March 4, 1997, four soil borings, NK-SB-256 through NK-SB-259 (Drawing 1), were advanced in the vicinity of the former oil storage rack by Loureiro Engineering Associates, P.C. (LEA) personnel. Soil samples were collected from each of the borings in continuous two-foot intervals to a depth of twelve feet. The depth of the borings was selected to insure that the varved clay was encountered and that sufficient data were collected for comparisons against the direct exposure criteria in the Connecticut Remediation Standard Regulations (RSRs).

A total of twenty-five soil samples from the soil borings were submitted to the LEA Analytical Laboratory and screened for the presence of target VOCs (benzene (BZ), ethylbenzene (EBZ), tetrachloroethylene (PCE), toluene (TL), 1,1,1-trichloroethane (TCA), trichloroethylene (TCE), and xylenes (XYL)). Based on visual, olfactory, or instrument evidence, and with consideration of the potential release mechanism, two soil samples from each boring were submitted to Averill Environmental Laboratory, Inc. (AEL) and analyzed for the presence of VOCs, metals, and TPH. In addition, one soil sample from each boring was submitted to AEL and analyzed for the presence of SVOCs.

Groundwater samples were also collected from borings NK-SB-256, NK-SB-257, and NK-SB-259 using Geoprobe® screenpoint groundwater sampling techniques. A groundwater sample was also collected from boring NK-SB-258 using a temporary, one-inch diameter, polyvinyl chloride (PVC) well screen. The groundwater samples were collected from depths of 5 to 6 feet below the ground surface in borings NK-SB-257 and NK-SB-259, from a depth of 6 to 7 feet in boring NK-SB-256, and from 4 to 7 feet in boring NK-SB-258. The groundwater samples were submitted to AEL for analysis of VOCs, SVOCs, and TPH. The analyses selected were concurrent with the analyses conducted for the soil samples from the same locations. A summary of the samples collected and analyses performed is included in Table 1.

**Investigation Results:** Based on the boring logs, groundwater was encountered at approximately four feet in borings NK-SB-256 through NK-SB-259. Varved clay was encountered at approximately 8.5 feet in boring NK-SB-258 and 9 feet in borings NK-SB-256, NK-SB-257, and NK-SB-259. No visual or olfactory evidence of contamination was noted in the boring logs, except for a slight petroleum odor in boring NK-SB-256 at 2 to 3 feet. Fill material was noted in borings NK-SB-256 at 0 to 0.5 foot and NK-SB-257 at 0 to 0.5 foot and consisted of trap-rock gravel mixed with sand.

Concentrations of constituents detected in soil samples collected for this unit are presented in Table 2. A complete summary of soil analytical results with detection limits is presented in Table 3. Detected concentrations at each sampling location are shown on Drawing 1. Several VOCs were detected in the soil samples submitted to the LEA Analytical Laboratory, from borings NK-SB-257, NK-SB-258, and NK-SB-259, including PCE, TCE, and XYL.

PCE was the only quantifiable VOC detected in the soil samples submitted to AEL. PCE was detected in soil samples from locations NK-SB-257, NK-SB-258, and NK-SB-259. No other VOCs were detected in the remaining soil samples submitted to AEL. Also, TCA and TCE were noted as "N1" in boring NK-SB-258 at 0 to 2 feet. The "N1" qualifier indicates that it was noted above the method detection limit, but below the reportable quantitation limit. TCE was noted as "N1" in boring NK-SB-259 at 0 to 2 feet.

No SVOCs were detected in the soil samples submitted to AEL. However, benzo[b]fluoranthene (BBF) was noted as "N1" in boring NK-SB-257 at 0 to 2 feet. TPH was detected in boring NK-SB-256 at 2 to 4 feet and in the duplicate sample analyzed from this location. TPH was not detected in any of the remaining soil samples submitted to AEL for analysis.

One or more of the metals analyzed were detected in each of the soil samples submitted for analysis. These metals include barium, cadmium, chromium, and zinc.

No VOCs, SVOCs, or TPH were detected in any of the groundwater samples submitted for analysis to AEL. A complete summary of groundwater analytical results with detection limits is presented in Table 4.

**Data Evaluation and Conclusions:** Based on the presence of VOCs in the soil samples at borings NK-SB-257 through NK-SB-259 and TPH in boring NK-SB-256 at a depth of 2 to 4 feet, there is evidence that a release may have occurred in the vicinity of this unit. The degree and extent of the potential release has not yet been adequately characterized in the vicinity of these borings.

The soil boring data were compared against the default numeric criteria included in the RSR and the site-specific background soil concentrations for the North Klondike for various inorganic constituents (Fuss & O'Neill, 1994). For a more detailed discussion of background concentrations of metals in soil refer to *Technical Memorandum 4, Background Soil Data*. Criteria are established in the RSR based on exposure pathways for various environmental media, including soil and groundwater.

A qualitative evaluation was performed because characterization of the identified contamination has not been completed. The intent of the comparison is not to show compliance with the RSR, but rather to give a general perspective regarding the magnitude of contamination detected. This qualitative evaluation of the soils data is based on a comparison to the default numeric residential and industrial/commercial direct

exposure criteria (DEC), the default numeric GB pollutant mobility criteria (PMC) included in the RSR, as well as the site-specific background concentrations.

The concentrations of the metals detected in the soil samples are typical of site-wide background concentrations, and are not indicative of a release from this unit. For the metals detected in soil, no exceedances of the default numeric residential or industrial/commercial DEC were noted. For the VOCs and TPH detected in the soil, no exceedances of the default numeric residential or industrial/commercial DEC or the default numeric GB PMC (for soil samples from above the water table) were noted.

#### **May 1997 Investigation (LEA):**

**Description:** On May 21 and 22, 1997, five soil borings (NK-SB-299 through NK-SB-303) were advanced in the vicinity of the former oil storage rack to the varved clay, as shown on Drawing 1. Soil samples were collected from each of the borings in continuous two-foot intervals to a depth of ten feet. The five additional borings were advanced around borings NK-SB-257 through NK-SB-259, where VOCs had been detected, and boring NK-SB-256, where TPH had been detected.

A total of twenty-seven soil samples from the soil borings were submitted to the LEA Analytical Laboratory and screened for the presence of target VOCs. Quanterra Inc. (QNT) analyzed two soil samples from each boring at select depths for the presence of VOCs. Soil samples from the depths of 0 to 2 and 2 to 4 feet (above the water table) from three of these additional borings were also analyzed by QNT for the presence of TPH. A summary of the samples collected and analyses performed for this unit is included in Table 1.

**Investigation Results:** Based on the boring logs, groundwater was encountered between approximately four to six feet in borings NK-SB-299 through NK-SB-303. Varved clay was encountered at approximately 9 feet in borings NK-SB-301 and NK-SB-303, 9.5 feet in boring NK-SB-302, and 10 feet in borings NK-SB-299 and NK-SB-300. No visual or olfactory evidence of contamination was noted on the boring logs. Asphalt was noted in boring NK-SB-299 at 0 to 0.5 foot.

Concentrations of constituents detected in soil samples collected for this unit are presented in Table 2. A complete summary of soil analytical results with detection limits is presented in Table 3. Detected concentrations at each sampling location are shown on Drawing 1. No VOCs were detected in the soil samples submitted to the LEA Analytical Laboratory from the five borings. Acetone and methylene chloride were the only VOCs detected in the soil samples submitted to QNT. Both of these VOCs are common laboratory contaminants which were not detected during the previous investigation, and are not believed to be present at this unit. TPH was detected in boring NK-SB-301 at 0 to 2 feet. TPH was not detected in this boring at a depth 2 to 4 feet, or in any of the other samples analyzed for TPH from the other borings.

**Data Evaluation and Conclusions:** Based on the presence of VOCs in the soil at borings NK-SB-257 through NK-SB-259 and TPH in borings NK-SB-256 at a depth of 2 to 4 feet and NK-SB-301 at 0 to 2 feet, there is evidence that a limited release may have occurred in the vicinity of this unit. The degree and extent of the potential release has been adequately characterized in the vicinity of these borings.

The soil boring data were compared against the default numeric criteria included in the RSR. For the VOCs detected in the soil, no exceedances of the default numeric residential or industrial/commercial DEC or the default numeric GB PMC (for soil samples from above the water table) were noted.

Based on the analytical results for the soil samples, this unit is believed to be adequately characterized. No exceedances of the default numeric criteria included in the RSR were noted. As a result, no further action is necessary at this unit. The analytical results for groundwater samples immediately below this unit did not indicate the presence of VOCs, SVOCs, or TPH. The groundwater data for this unit supports the conclusion that no further action is warranted.

#### **References:**

Fuss & O'Neil, Inc, 1994, *Soil Sampling Background Areas – North Klondike*, prepared for Pratt & Whitney.

Keystone Aerial Surveys, Inc. 1965, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Keystone Aerial Surveys, Inc. 1970, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Keystone Aerial Surveys, Inc. 1975, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Loureiro Engineering Associates. August 18, 1995. *Rentschler Airport and Klondike Areas Data Gap Investigation and Work Plan*, Pratt & Whitney, 400 Main Street, East Hartford, CT.

Loureiro Engineering Associates. October 1995. *Rentschler Airport and Klondike Areas Data Gap Investigation and Work Plan*, United Technologies Corporation, Pratt & Whitney, 400 Main Street, East Hartford, CT.

P&W Photographic Services Department, 1977, *Aerial Photograph, Negative Number 77445-0054AA*, Pratt & Whitney, East Hartford, CT.

P&W Photographic Services Department, 1983, *Aerial Photograph, Negative Number 83C3381-050*, Pratt & Whitney, East Hartford, CT.

P&W Photographic Services Department, 1987, *Aerial Photograph, Negative Number 87C2398-118*, Pratt & Whitney, East Hartford, CT.

P&W Plant Engineering Department, May 24, 1976, *Plan of Fire Protection System, East Hartford Plant*, Pratt & Whitney Aircraft, East Hartford, CT.

D R

## **TABLES**

**Table 1**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 1 of 2

Sample Information						Analysis Information								
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Extraction	Miscellaneous
NK-SB-256	1027078	3/ 4/97	0	2	SB	x								
NK-SB-256	1027079	3/ 4/97	2	4	SB	x	x					X		X
NK-SB-256	1027080	3/ 4/97	2	4	SB	x	x					X		X
NK-SB-256	1027081	3/ 4/97	4	6	SB	x								
NK-SB-256	1027082	3/ 4/97	6	8	SB	x								
NK-SB-256	1027121	3/ 4/97	6	7	GW		x	x						x
NK-SB-256	1027083	3/ 4/97	8	10	SB	x	x	x				X		x
NK-SB-256	1027084	3/ 4/97	10	12	SB	x								
NK-SB-257	1027085	3/ 4/97	0	2	SB	X	X	x				X		x
NK-SB-257	1027086	3/ 4/97	2	4	SB	x								
NK-SB-257	1027087	3/ 4/97	4	6	SB	x	x					X		x
NK-SB-257	1027122	3/ 4/97	5	6	GW		x	x						x
NK-SB-257	1027088	3/ 4/97	6	8	SB	x								
NK-SB-257	1027089	3/ 4/97	8	10	SB	x								
NK-SB-257	1027090	3/ 4/97	10	12	SB	x								
NK-SB-258	1027091	3/ 4/97	0	2	SB	x	X					X		x
NK-SB-258	1027092	3/ 4/97	2	4	SB	x								
NK-SB-258	1027093	3/ 4/97	4	6	SB	X	x	x				X		x
NK-SB-258	1027123	3/ 4/97	4	7	GW		x	x						x
NK-SB-258	1027094	3/ 4/97	6	8	SB	X								
NK-SB-258	1027095	3/ 4/97	8	10	SB	x								
NK-SB-258	1027096	3/ 4/97	10	12	SB	x								
NK-SB-259	1027097	3/ 4/97	0	2	SB	X	X	x				X		x
NK-SB-259	1027098	3/ 4/97	2	4	SB	x								
NK-SB-259	1027099	3/ 4/97	4	6	SB	x								
NK-SB-259	1027124	3/ 4/97	5	6	GW		x	x						x
NK-SB-259	1027100	3/ 4/97	6	8	SB	x	x					X		x
NK-SB-259	1027101	3/ 4/97	8	10	SB	x								
NK-SB-259	1027102	3/ 4/97	10	12	SB	x								
NK-SB-299	1634058	5/21/97	0	2	SPB	x								X
NK-SB-299	1634059	5/21/97	2	4	SPB	x	X							x

Notes: 1. Legend: X - Analysed; at least one analyte over the detection limit; x - Analysed, no analytes in group over the detection limit

2. Printed on 04/20/98

**LEA**



**Table 1**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 2 of 2

Sample Information						Analysis Information								
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Extraction	Miscellaneous
NK-SB-299	1634060	5/21/97	2	4	SPB	x	x							x
NK-SB-299	1634061	5/21/97	4	6	SB	x	X							
NK-SB-299	1634062	5/21/97	6	8	SB	x								
NK-SB-299	1634063	5/21/97	8	10	SB	x								
NK-SB-300	1634064	5/21/97	0	2	SB	x								x
NK-SB-300	1634065	5/21/97	2	4	SB	x	X							x
NK-SB-300	1634066	5/21/97	4	6	SB	x								
NK-SB-300	1634067	5/21/97	6	8	SB	x	X							
NK-SB-300	1634068	5/21/97	8	10	SB	x								
NK-SB-301	1634069	5/21/97	0	2	SB	x								x
NK-SB-301	1634070	5/21/97	2	4	SB	x	X							x
NK-SB-301	1634071	5/21/97	4	6	SB	x								
NK-SB-301	1634072	5/21/97	6	8	SB	x	X							
NK-SB-301	1634073	5/21/97	8	10	SB	x								
NK-SB-302	1634076	5/22/97	0	2	SB	x								x
NK-SB-302	1634077	5/22/97	2	4	SB	x								x
NK-SB-302	1634078	5/22/97	2	4	SB	x								
NK-SB-302	1634079	5/22/97	4	6	SB	x	X							
NK-SB-302	1634080	5/22/97	6	8	SB	x								
NK-SB-302	1634081	5/22/97	8	10	SB	x								
NK-SB-303	1634082	5/22/97	0	2	SB	x								x
NK-SB-303	1634083	5/22/97	2	4	SB	x								x
NK-SB-303	1634084	5/22/97	4	6	SB	x								
NK-SB-303	1634085	5/22/97	6	8	SB	x	X							
NK-SB-303	1634086	5/22/97	8	10	SB	x								

Notes: 1. Legend: X - Analysed; at least one analyte over the detection limit; x - Analysed, no analytes in group over the detection limit

2. Printed on 04/20/98

**LEA**

### Table 2

Page 1 of 3

[illegible]

Notes: 1. Only Detects Shown  
2. Printed on 04/20/98

LEA

### Table 2

Page 2 of 3

[illegible]

Notes: 1. Only Detects Shown  
2. Printed on 04/20/98

LEA

### Table 2

Page 3 of 3

[illegible]

Notes: 1. Only Detects Shown  
2. Printed on 04/20/98

LEA

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 1 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256
	Sample ID	1027078	1027079	1027079	1027080	1027080	1027081	1027082
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:22	10:25	10:25	10:25	10:25	10:36	10:40
	Sample Depth	0' - 2'	2' - 4'	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	AEL	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1767-267	AEL97003082	97-1768-268	AEL97003083	97-1769-269	97-1770-270	97-1771-271
Constituent	Units							
Date Metals Analyzed	-		03/18/1997		03/18/1997			
Date Organics Analyzed	-	03/05/1997	03/18/1997	03/05/1997	03/18/1997	03/05/1997	03/05/1997	03/05/1997
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg		<0.44		<0.43			
Barium	mg/kg		35.6		22.9			
Cadmium	mg/kg		<3.3		<3.21			
Chromium	mg/kg		9.57		8.97			
Lead	mg/kg		<22		<21.4			
Mercury	mg/kg		<0.09		<0.09			
Nickel	mg/kg		<11		<10.7			
Selenium	mg/kg		<1.1		<1.07			
Silver	mg/kg		<5.5		<5.34			
Zinc	mg/kg		13		11.4			
Dibromo-3-chloropropane, 1,2-	µg/kg							
Total Petroleum Hydrocarbons	mg/kg		134		125			
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 2 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256
	Sample ID	1027078	1027079	1027079	1027080	1027080	1027081	1027082
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:22	10:25	10:25	10:25	10:25	10:36	10:40
	Sample Depth	0' - 2'	2' - 4'	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	AEL	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1767-267	AEL97003082	97-1768-268	AEL97003083	97-1769-269	97-1770-270	97-1771-271
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							
Dinitrophenol,2,4-	µg/kg							
Dinitrotoluene,2,4-	µg/kg							
Dinitrotoluene,2,6-	µg/kg							
Diphenylhydrazine,1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 3 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256
	Sample ID	1027078	1027079	1027079	1027080	1027080	1027081	1027082
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:22	10:25	10:25	10:25	10:25	10:36	10:40
	Sample Depth	0' - 2'	2' - 4'	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	AEL	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1767-267	AEL97003082	97-1768-268	AEL97003083	97-1769-269	97-1770-270	97-1771-271
Constituent	Units							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
Naphthalene	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol,2-	µg/kg							
Nitrophenol,4-	µg/kg							
Pentachlorophenol	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Propane),2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Acetone	µg/kg		<25		<29			
Acrolein	µg/kg		<13		<14			
Acrylonitrile	µg/kg		<13		<14			
Allyl Chloride	µg/kg							
Benzene	µg/kg		<5.1		<5.8			
Benzene (mobile)	µg/kg	<8		<8		<8	<8	<8
Bromobenzene	µg/kg		<5.1		<5.8			
Bromoform	µg/kg		<5.1		<5.8			
Carbon Disulfide	µg/kg		<5.1		<5.8			
Carbon Tetrachloride	µg/kg		<5.1		<5.8			
Chlorobenzene	µg/kg		<5.1		<5.8			
Chlorodibromomethane	µg/kg		<5.1		<5.8			
Chloroethane	µg/kg		<5.1		<5.8			
Chloroethyl Vinyl Ether,2-	µg/kg		<5.1		<5.8			
Chloroform	µg/kg		<5.1		<5.8			

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 4 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256
	Sample ID	1027078	1027079	1027079	1027080	1027080	1027081	1027082
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:22	10:25	10:25	10:25	10:25	10:36	10:40
	Sample Depth	0' - 2'	2' - 4'	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	AEL	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1767-267	AEL97003082	97-1768-268	AEL97003083	97-1769-269	97-1770-270	97-1771-271
Constituent	Units							
Chloroprene,beta-	µg/kg							
Chlorotoluene,o-	µg/kg		<5.1		<5.8			
Chlorotoluene,p-	µg/kg		<5.1		<5.8			
Dibromomethane	µg/kg		<5.1		<5.8			
Dichlorobenzene,1,2-	µg/kg		<5.1		<5.8			
Dichlorobenzene,1,3-	µg/kg		<5.1		<5.8			
Dichlorobenzene,1,4-	µg/kg		<5.1		<5.8			
Dichlorobromomethane	µg/kg		<5.1		<5.8			
Dichlorodifluoromethane	µg/kg		<5.1		<5.8			
Dichloroethane,1,1-	µg/kg		<5.1		<5.8			
Dichloroethane,1,2-	µg/kg		<5.1		<5.8			
Dichloroethylene,1,1-	µg/kg		<5.1		<5.8			
Dichloroethylene,1,2-cis-	µg/kg		<5.1		<5.8			
Dichloroethylene,1,2-trans-	µg/kg		<5.1		<5.8			
Dichloropropane,1,2-	µg/kg		<5.1		<5.8			
Dichloropropylene,1,3-	µg/kg							
Dichloropropylene,1,3-cis-	µg/kg		<5.1		<5.8			
Dichloropropylene,1,3-trans-	µg/kg		<5.1		<5.8			
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg		<5.1		<5.8			
Ethylbenzene (mobile)	µg/kg	<17		<17		<17	<17	<17
Ethylene Dibromide	µg/kg							
Hexanone,2-	µg/kg		<13		<14			
Iodomethane	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg		<5.1		<5.8			
Methyl Chloride	µg/kg		<5.1		<5.8			
Methyl Ethyl Ketone	µg/kg		<13		<14			

Notes: 1. Printed on 04/20/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 5 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-256
	Sample ID	1027078	1027079	1027079	1027080	1027080	1027081	1027082
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:22	10:25	10:25	10:25	10:25	10:36	10:40
	Sample Depth	0' - 2'	2' - 4'	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'
	Laboratory	LEA	AEL	LEA	AEL	LEA	LEA	LEA
	Lab. Number	97-1767-267	AEL97003082	97-1768-268	AEL97003083	97-1769-269	97-1770-270	97-1771-271
Constituent	Units							
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone,4-	µg/kg		<13		<14			
Methyl-tert-butyl Ether	µg/kg		<5.1		<5.8			
Methylene Chloride	µg/kg		<5.1		<5.8			
Propionitrile	µg/kg							
Styrene	µg/kg		<5.1		<5.8			
Tetrachloroethane,1,1,1,2-	µg/kg		<5.1		<5.8			
Tetrachloroethane,1,1,2,2-	µg/kg		<5.1		<5.8			
Tetrachloroethylene	µg/kg		<5.1		<5.8			
Tetrachloroethylene (mobile)	µg/kg	<21		<22		<21	<21	<22
Toluene	µg/kg		<5.1		<5.8			
Toluene (mobile)	µg/kg	<12		<12		<12	<12	<12
Trichloroethane,1,1,1,1-	µg/kg		<5.1		<5.8			
Trichloroethane,1,1,1,1- (mobile)	µg/kg	<211		<215		<211	<211	<215
Trichloroethane,1,1,1,2-	µg/kg		<5.1		<5.8			
Trichloroethylene	µg/kg		<5.1		<5.8			
Trichloroethylene (mobile)	µg/kg	<21		<21		<21	<21	<21
Trichloromonofluoromethane	µg/kg		<5.1		<5.8			
Trichloropropane,1,2,3-	µg/kg		<5.1		<5.8			
Vinyl Acetate	µg/kg		<5.1		<5.8			
Vinyl Chloride	µg/kg		<5.1		<5.8			
Xylene,o- (mobile)	µg/kg	<22		<23		<22	<22	<23
Xylenes (Total)	µg/kg		<5.1		<5.8			
Xylenes,m- & p- (mobile)	µg/kg	<11		<11		<11	<11	<11

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 6 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257
	Sample ID	1027083	1027083	1027084	1027085	1027085	1027086	1027087
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:52	10:52	10:55	12:47	12:47	12:50	12:55
	Sample Depth	8' - 10'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	AEL
	Lab. Number	AEL97003084	97-1772-272	97-1773-273	AEL97003085	97-1774-274	97-1775-275	AEL97003086
Constituent	Units							
Date Metals Analyzed	-	03/18/1997			03/18/1997			03/18/1997
Date Organics Analyzed	-	03/18/1997	03/05/1997	03/05/1997	03/18/1997	03/05/1997	03/05/1997	03/18/1997
Date Semi-volatile Organics Analyzed	-	04/04/1997			04/04/1997			
Arsenic	mg/kg	<0.48			<0.5			<0.45
Barium	mg/kg	25.8			34.2			28.5
Cadmium	mg/kg	<3.64			4.74			<3.41
Chromium	mg/kg	<6.06			6.93			<5.68
Lead	mg/kg	<24.2			<24.3			<22.7
Mercury	mg/kg	<0.10			<0.10			<0.09
Nickel	mg/kg	<12.1			<12.2			<11.4
Selenium	mg/kg	<1.21			<1.22			<1.14
Silver	mg/kg	<6.06			<6.08			<5.68
Zinc	mg/kg	13			15.8			10.4
Dibromo-3-chloropropane, 1,2-	µg/kg							
Total Petroleum Hydrocarbons	mg/kg	<40.3			<40.4			<38.4
Acenaphthene	µg/kg	<410			<400			
Acenaphthylene	µg/kg	<410			<400			
Anthracene	µg/kg	<410			<400			
Benzidine	µg/kg	<410			<400			
Benzo[a]anthracene	µg/kg	<410			<400			
Benzo[a]pyrene	µg/kg	<410			<400			
Benzo[b]fluoranthene	µg/kg	<410			<400 N1			
Benzo[ghi]perylene	µg/kg	<410			<400			
Benzo[k]fluoranthene	µg/kg	<410			<400			
Bis(2-chloroethoxy)methane	µg/kg	<410			<400			
Bis(2-chloroethyl) Ether	µg/kg	<410			<400			
Bis(2-ethylhexyl)phthalate	µg/kg	<410			<400			
Bromophenyl Phenyl Ether, 4-	µg/kg	<410			<400			

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 7 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257
	Sample ID	1027083	1027083	1027084	1027085	1027085	1027086	1027087
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:52	10:52	10:55	12:47	12:47	12:50	12:55
	Sample Depth	8' - 10'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	AEL
	Lab. Number	AEL97003084	97-1772-272	97-1773-273	AEL97003085	97-1774-274	97-1775-275	AEL97003086
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg	<410			<400			
Chloronaphthalene,2-	µg/kg	<410			<400			
Chlorophenol,2-	µg/kg	<410			<400			
Chlorophenyl Phenyl Ether,4-	µg/kg	<410			<400			
Chrysene	µg/kg	<410			<400			
Di-n-butyl Phthalate	µg/kg	<410			<400			
Di-n-octyl Phthalate	µg/kg	<410			<400			
Dibenzo[a,h]anthracene	µg/kg	<410			<400			
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg	<410			<400			
Dichlorophenol,2,4-	µg/kg	<410			<400			
Diethyl Phthalate	µg/kg	<410			<400			
Dimethyl Phthalate	µg/kg	<410			<400			
Dimethylphenol,2,4-	µg/kg	<410			<400			
Dinitro-o-cresol,4,6-	µg/kg	<410			<400			
Dinitrophenol,2,4-	µg/kg	<410			<400			
Dinitrotoluene,2,4-	µg/kg	<410			<400			
Dinitrotoluene,2,6-	µg/kg	<410			<400			
Diphenylhydrazine,1,2-	µg/kg	<410			<400			
Fluoranthene	µg/kg	<410			<400			
Fluorene	µg/kg	<410			<400			
Hexachlorobenzene	µg/kg	<410			<400			
Hexachlorobutadiene	µg/kg	<410			<400			
Hexachlorocyclopentadiene	µg/kg	<410			<400			
Hexachloroethane	µg/kg	<410			<400			
Indeno(1,2,3-cd)pyrene	µg/kg	<410			<400			
Isophorone	µg/kg	<410			<400			
N-nitroso-n-propylamine	µg/kg	<410			<400			

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 8 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257
	Sample ID	1027083	1027083	1027084	1027085	1027085	1027086	1027087
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:52	10:52	10:55	12:47	12:47	12:50	12:55
	Sample Depth	8' - 10'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	AEL
	Lab. Number	AEL97003084	97-1772-272	97-1773-273	AEL97003085	97-1774-274	97-1775-275	AEL97003086
Constituent	Units							
N-nitrosodimethylamine	µg/kg	<410			<400			
N-nitrosodiphenylamine	µg/kg	<410			<400			
Naphthalene	µg/kg	<410			<400			
Nitrobenzene	µg/kg	<410			<400			
Nitrophenol,2-	µg/kg	<410			<400			
Nitrophenol,4-	µg/kg	<410			<400			
Pentachlorophenol	µg/kg	<410			<400			
Phenanthrene	µg/kg	<410			<400			
Phenol	µg/kg	<410			<400			
Propane),2,2'-oxybis(2-chloro-	µg/kg	<410			<400			
Pyrene	µg/kg	<410			<400			
Trichlorobenzene,1,2,4-	µg/kg	<410			<400			
Trichlorophenol,2,4,6-	µg/kg	<410			<400			
Acetone	µg/kg	<27			<39			<37
Acrolein	µg/kg	<14			<19			<18
Acrylonitrile	µg/kg	<14			<19			<18
Allyl Chloride	µg/kg							
Benzene	µg/kg	<5.5			<7.8			<7.4
Benzene (mobile)	µg/kg		<8	<8		<8	<8	
Bromobenzene	µg/kg	<5.5			<7.8			<7.4
Bromoform	µg/kg	<5.5			<7.8			<7.4
Carbon Disulfide	µg/kg	<5.5			<7.8			<7.4
Carbon Tetrachloride	µg/kg	<5.5			<7.8			<7.4
Chlorobenzene	µg/kg	<5.5			<7.8			<7.4
Chlorodibromomethane	µg/kg	<5.5			<7.8			<7.4
Chloroethane	µg/kg	<5.5			<7.8			<7.4
Chloroethyl Vinyl Ether,2-	µg/kg	<5.5			<7.8			<7.4
Chloroform	µg/kg	<5.5			<7.8			<7.4

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 9 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257
	Sample ID	1027083	1027083	1027084	1027085	1027085	1027086	1027087
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:52	10:52	10:55	12:47	12:47	12:50	12:55
	Sample Depth	8' - 10'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	AEL
	Lab. Number	AEL97003084	97-1772-272	97-1773-273	AEL97003085	97-1774-274	97-1775-275	AEL97003086
Constituent	Units							
Chloroprene,beta-	µg/kg							
Chlorotoluene,o-	µg/kg	<5.5			<7.8			<7.4
Chlorotoluene,p-	µg/kg	<5.5			<7.8			<7.4
Dibromomethane	µg/kg	<5.5			<7.8			<7.4
Dichlorobenzene,1,2-	µg/kg	<5.5			<7.8			<7.4
Dichlorobenzene,1,3-	µg/kg	<5.5			<7.8			<7.4
Dichlorobenzene,1,4-	µg/kg	<5.5			<7.8			<7.4
Dichlorobromomethane	µg/kg	<5.5			<7.8			<7.4
Dichlorodifluoromethane	µg/kg	<5.5			<9.7			<7.4
Dichloroethane,1,1-	µg/kg	<5.5			<7.8			<7.4
Dichloroethane,1,2-	µg/kg	<5.5			<7.8			<7.4
Dichloroethylene,1,1-	µg/kg	<5.5			<7.8			<7.4
Dichloroethylene,1,2-cis-	µg/kg	<5.5			<7.8			<7.4
Dichloroethylene,1,2-trans-	µg/kg	<5.5			<7.8			<7.4
Dichloropropane,1,2-	µg/kg	<5.5			<7.8			<7.4
Dichloropropylene,1,3-	µg/kg							
Dichloropropylene,1,3-cis-	µg/kg	<5.5			<7.8			<7.4
Dichloropropylene,1,3-trans-	µg/kg	<5.5			<7.8			<7.4
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg	<5.5			<7.8			<7.4
Ethylbenzene (mobile)	µg/kg		<17	<17		<17	<17	
Ethylene Dibromide	µg/kg							
Hexanone,2-	µg/kg	<14			<19			<18
Iodomethane	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg	<5.5			<7.8			<7.4
Methyl Chloride	µg/kg	<5.5			<7.8			<7.4
Methyl Ethyl Ketone	µg/kg	<14			<19			<18

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 10 of 55

	Location ID	NK-SB-256	NK-SB-256	NK-SB-256	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257
	Sample ID	1027083	1027083	1027084	1027085	1027085	1027086	1027087
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	10:52	10:52	10:55	12:47	12:47	12:50	12:55
	Sample Depth	8' - 10'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'	4' - 6'
	Laboratory	AEL	LEA	LEA	AEL	LEA	LEA	AEL
	Lab. Number	AEL97003084	97-1772-272	97-1773-273	AEL97003085	97-1774-274	97-1775-275	AEL97003086
Constituent	Units							
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg	<14			<19			<18
Methyl-tert-butyl Ether	µg/kg	<5.5			<7.8			<7.4
Methylene Chloride	µg/kg	<5.5			<9.7			<7.4
Propionitrile	µg/kg							
Styrene	µg/kg	<5.5			<7.8			<7.4
Tetrachloroethane, 1,1,1,2-	µg/kg	<5.5			<7.8			<7.4
Tetrachloroethane, 1,1,2,2-	µg/kg	<5.5			<7.8			<7.4
Tetrachloroethylene	µg/kg	<5.5			8.8			<7.4
Tetrachloroethylene (mobile)	µg/kg		<21	<22		20 J	<22	
Toluene	µg/kg	<5.5			<7.8			<7.4
Toluene (mobile)	µg/kg		<12	<12		<12	<12	
Trichloroethane, 1,1,1-	µg/kg	<5.5			<7.8			<7.4
Trichloroethane, 1,1,1- (mobile)	µg/kg		<211	<215		<211	<219	
Trichloroethane, 1,1,2-	µg/kg	<5.5			<7.8			<7.4
Trichloroethylene	µg/kg	<5.5			<7.8			<7.4
Trichloroethylene (mobile)	µg/kg		<21	<21		<21	<22	
Trichloromonofluoromethane	µg/kg	<5.5			<7.8			<7.4
Trichloropropane, 1,2,3-	µg/kg	<5.5			<7.8			<7.4
Vinyl Acetate	µg/kg	<5.5			<7.8			<7.4
Vinyl Chloride	µg/kg	<5.5			<7.8			<7.4
Xylene, o- (mobile)	µg/kg		<22	<23		<22	<23	
Xylenes (Total)	µg/kg	<5.5			<7.8			<7.4
Xylenes, m- & p- (mobile)	µg/kg		<11	<11		<11	<12	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 11 of 55

	Location ID	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-258	NK-SB-258	NK-SB-258
	Sample ID	1027087	1027088	1027089	1027090	1027091	1027091	1027092
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	12:55	13:00	13:05	13:07	14:00	14:00	14:02
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	AEL	LEA	LEA
	Lab. Number	97-1776-276	97-1777-277	97-1778-278	97-1779-279	AEL97003087	97-1780-280	97-1781-281
Constituent	Units							
Date Metals Analyzed	-					03/18/1997		
Date Organics Analyzed	-	03/05/1997	03/05/1997	03/05/1997	03/05/1997	03/18/1997	03/05/1997	03/05/1997
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg					<0.49		
Barium	mg/kg					57.1		
Cadmium	mg/kg					<3.67		
Chromium	mg/kg					6.23		
Lead	mg/kg					<24.4		
Mercury	mg/kg					<0.10		
Nickel	mg/kg					<12.2		
Selenium	mg/kg					<1.22		
Silver	mg/kg					<6.11		
Zinc	mg/kg					12.1		
Dibromo-3-chloropropane, 1,2-	µg/kg							
Total Petroleum Hydrocarbons	mg/kg					<41.2		
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 12 of 55

	Location ID	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-258	NK-SB-258	NK-SB-258
	Sample ID	1027087	1027088	1027089	1027090	1027091	1027091	1027092
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	12:55	13:00	13:05	13:07	14:00	14:00	14:02
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	AEL	LEA	LEA
	Lab. Number	97-1776-276	97-1777-277	97-1778-278	97-1779-279	AEL97003087	97-1780-280	97-1781-281
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							
Dinitrophenol,2,4-	µg/kg							
Dinitrotoluene,2,4-	µg/kg							
Dinitrotoluene,2,6-	µg/kg							
Diphenylhydrazine,1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 13 of 55

	Location ID	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-258	NK-SB-258	NK-SB-258
	Sample ID	1027087	1027088	1027089	1027090	1027091	1027091	1027092
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	12:55	13:00	13:05	13:07	14:00	14:00	14:02
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	AEL	LEA	LEA
	Lab. Number	97-1776-276	97-1777-277	97-1778-278	97-1779-279	AEL97003087	97-1780-280	97-1781-281
Constituent	Units							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
Naphthalene	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol,2-	µg/kg							
Nitrophenol,4-	µg/kg							
Pentachlorophenol	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Propane),2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Acetone	µg/kg					<40		
Acrolein	µg/kg					<20		
Acrylonitrile	µg/kg					<20		
Allyl Chloride	µg/kg							
Benzene	µg/kg					<8.0		
Benzene (mobile)	µg/kg	<8	<8	<8	<8		<8	<8
Bromobenzene	µg/kg					<8.0		
Bromoform	µg/kg					<8.0		
Carbon Disulfide	µg/kg					<8.0		
Carbon Tetrachloride	µg/kg					<8.0		
Chlorobenzene	µg/kg					<8.0		
Chlorodibromomethane	µg/kg					<8.0		
Chloroethane	µg/kg					<8.0		
Chloroethyl Vinyl Ether,2-	µg/kg					<8.0		
Chloroform	µg/kg					<8.0		

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 14 of 55

	Location ID	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-258	NK-SB-258	NK-SB-258
	Sample ID	1027087	1027088	1027089	1027090	1027091	1027091	1027092
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	12:55	13:00	13:05	13:07	14:00	14:00	14:02
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	AEL	LEA	LEA
	Lab. Number	97-1776-276	97-1777-277	97-1778-278	97-1779-279	AEL97003087	97-1780-280	97-1781-281
Constituent	Units							
Chloroprene, beta-	µg/kg							
Chlorotoluene, o-	µg/kg					<8.0		
Chlorotoluene, p-	µg/kg					<8.0		
Dibromomethane	µg/kg					<8.0		
Dichlorobenzene, 1,2-	µg/kg					<8.0		
Dichlorobenzene, 1,3-	µg/kg					<8.0		
Dichlorobenzene, 1,4-	µg/kg					<8.0		
Dichlorobromomethane	µg/kg					<8.0		
Dichlorodifluoromethane	µg/kg					<22		
Dichloroethane, 1,1-	µg/kg					<8.0		
Dichloroethane, 1,2-	µg/kg					<8.0		
Dichloroethylene, 1,1-	µg/kg					<8.0		
Dichloroethylene, 1,2-cis-	µg/kg					<8.0		
Dichloroethylene, 1,2-trans-	µg/kg					<8.0		
Dichloropropane, 1,2-	µg/kg					<8.0		
Dichloropropylene, 1,3-	µg/kg							
Dichloropropylene, 1,3-cis-	µg/kg					<8.0		
Dichloropropylene, 1,3-trans-	µg/kg					<8.0		
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg					<8.0		
Ethylbenzene (mobile)	µg/kg	<17	<16	<17	<17		<16	<16
Ethylene Dibromide	µg/kg							
Hexanone, 2-	µg/kg					<20		
Iodomethane	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg					<8.0		
Methyl Chloride	µg/kg					<8.0		
Methyl Ethyl Ketone	µg/kg					<20		

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 15 of 55

	Location ID	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-257	NK-SB-258	NK-SB-258	NK-SB-258
	Sample ID	1027087	1027088	1027089	1027090	1027091	1027091	1027092
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	12:55	13:00	13:05	13:07	14:00	14:00	14:02
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	AEL	LEA	LEA
	Lab. Number	97-1776-276	97-1777-277	97-1778-278	97-1779-279	AEL97003087	97-1780-280	97-1781-281
Constituent	Units							
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg					<20		
Methyl-tert-butyl Ether	µg/kg					<8.0		
Methylene Chloride	µg/kg					<14		
Propionitrile	µg/kg							
Styrene	µg/kg					<8.0		
Tetrachloroethane, 1,1,1,2-	µg/kg					<8.0		
Tetrachloroethane, 1,1,2,2-	µg/kg					<8.0		
Tetrachloroethylene	µg/kg					20		
Tetrachloroethylene (mobile)	µg/kg	<22	<21	<22	<22		<20	<21
Toluene	µg/kg					<8.0		
Toluene (mobile)	µg/kg	<12	<12	<12	<12		<11	<12
Trichloroethane, 1,1,1-	µg/kg					<8.0 N1		
Trichloroethane, 1,1,1- (mobile)	µg/kg	<219	<207	<219	<219		<203	<207
Trichloroethane, 1,1,2-	µg/kg					<8.0		
Trichloroethylene	µg/kg					<8.0 N1		
Trichloroethylene (mobile)	µg/kg	<22	<20	<22	<22		<20	<20
Trichloromonofluoromethane	µg/kg					<8.0		
Trichloropropane, 1,2,3-	µg/kg					<8.0		
Vinyl Acetate	µg/kg					<8.0		
Vinyl Chloride	µg/kg					<8.0		
Xylene, o- (mobile)	µg/kg	<23	<22	<23	<23		<22	<22
Xylenes (Total)	µg/kg					<8.0		
Xylenes, m- & p- (mobile)	µg/kg	<12	<11	<12	<12		<11	<11

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 16 of 55

	Location ID	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-259	NK-SB-259
	Sample ID	1027093	1027093	1027094	1027095	1027096	1027097	1027097
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	14:10	14:10	14:14	14:20	14:25	14:47	14:47
	Sample Depth	4' - 6'	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'
	Laboratory	AEL	LEA	LEA	LEA	LEA	AEL	LEA
	Lab. Number	AEL97003088	97-1787-287	97-1788-288	97-1790-290	97-1791-291	AEL97003089	97-1792-292
Constituent	Units							
Date Metals Analyzed	-	03/18/1997					03/18/1997	
Date Organics Analyzed	-	03/18/1997	03/06/1997	03/06/1997	03/06/1997	03/06/1997	03/18/1997	03/06/1997
Date Semi-volatile Organics Analyzed	-	04/04/1997					04/04/1997	
Arsenic	mg/kg	<0.5					<0.4	
Barium	mg/kg	28					12.8	
Cadmium	mg/kg	<3.66					<3.31	
Chromium	mg/kg	<6.1					<5.52	
Lead	mg/kg	<24.4					<22.1	
Mercury	mg/kg	<0.10					<0.09	
Nickel	mg/kg	<12.2					<11	
Selenium	mg/kg	<1.22					<1.1	
Silver	mg/kg	<6.1					<5.52	
Zinc	mg/kg	38.8					7.51	
Dibromo-3-chloropropane, 1,2-	µg/kg							
Total Petroleum Hydrocarbons	mg/kg	<40.0					<36.4	
Acenaphthene	µg/kg	<400					<370	
Acenaphthylene	µg/kg	<400					<370	
Anthracene	µg/kg	<400					<370	
Benzidine	µg/kg	<400					<370	
Benzo[a]anthracene	µg/kg	<400					<370	
Benzo[a]pyrene	µg/kg	<400					<370	
Benzo[b]fluoranthene	µg/kg	<400					<370	
Benzo[ghi]perylene	µg/kg	<400					<370	
Benzo[k]fluoranthene	µg/kg	<400					<370	
Bis(2-chloroethoxy)methane	µg/kg	<400					<370	
Bis(2-chloroethyl) Ether	µg/kg	<400					<370	
Bis(2-ethylhexyl)phthalate	µg/kg	<400					<370	
Bromophenyl Phenyl Ether, 4-	µg/kg	<400					<370	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 17 of 55

	Location ID	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-259	NK-SB-259
	Sample ID	1027093	1027093	1027094	1027095	1027096	1027097	1027097
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	14:10	14:10	14:14	14:20	14:25	14:47	14:47
	Sample Depth	4' - 6'	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'
	Laboratory	AEL	LEA	LEA	LEA	LEA	AEL	LEA
	Lab. Number	AEL97003088	97-1787-287	97-1788-288	97-1790-290	97-1791-291	AEL97003089	97-1792-292
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg	<400					<370	
Chloronaphthalene,2-	µg/kg	<400					<370	
Chlorophenol,2-	µg/kg	<400					<370	
Chlorophenyl Phenyl Ether,4-	µg/kg	<400					<370	
Chrysene	µg/kg	<400					<370	
Di-n-butyl Phthalate	µg/kg	<400					<370	
Di-n-octyl Phthalate	µg/kg	<400					<370	
Dibenzo[a,h]anthracene	µg/kg	<400					<370	
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg	<400					<370	
Dichlorophenol,2,4-	µg/kg	<400					<370	
Diethyl Phthalate	µg/kg	<400					<370	
Dimethyl Phthalate	µg/kg	<400					<370	
Dimethylphenol,2,4-	µg/kg	<400					<370	
Dinitro-o-cresol,4,6-	µg/kg	<400					<370	
Dinitrophenol,2,4-	µg/kg	<400					<370	
Dinitrotoluene,2,4-	µg/kg	<400					<370	
Dinitrotoluene,2,6-	µg/kg	<400					<370	
Diphenylhydrazine,1,2-	µg/kg	<400					<370	
Fluoranthene	µg/kg	<400					<370	
Fluorene	µg/kg	<400					<370	
Hexachlorobenzene	µg/kg	<400					<370	
Hexachlorobutadiene	µg/kg	<400					<370	
Hexachlorocyclopentadiene	µg/kg	<400					<370	
Hexachloroethane	µg/kg	<400					<370	
Indeno(1,2,3-cd)pyrene	µg/kg	<400					<370	
Isophorone	µg/kg	<400					<370	
N-nitroso-n-propylamine	µg/kg	<400					<370	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 18 of 55

	Location ID	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-259	NK-SB-259
	Sample ID	1027093	1027093	1027094	1027095	1027096	1027097	1027097
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	14:10	14:10	14:14	14:20	14:25	14:47	14:47
	Sample Depth	4' - 6'	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'
	Laboratory	AEL	LEA	LEA	LEA	LEA	AEL	LEA
	Lab. Number	AEL97003089	97-1787-287	97-1788-288	97-1790-290	97-1791-291	AEL97003089	97-1792-292
Constituent	Units							
N-nitrosodimethylamine	µg/kg	<400					<370	
N-nitrosodiphenylamine	µg/kg	<400					<370	
Naphthalene	µg/kg	<400					<370	
Nitrobenzene	µg/kg	<400					<370	
Nitrophenol,2-	µg/kg	<400					<370	
Nitrophenol,4-	µg/kg	<400					<370	
Pentachlorophenol	µg/kg	<400					<370	
Phenanthrene	µg/kg	<400					<370	
Phenol	µg/kg	<400					<370	
Propane),2,2'-oxybis(2-chloro-	µg/kg	<400					<370	
Pyrene	µg/kg	<400					<370	
Trichlorobenzene,1,2,4-	µg/kg	<400					<370	
Trichlorophenol,2,4,6-	µg/kg	<400					<370	
Acetone	µg/kg	<24					<37	
Acrolein	µg/kg	<12					<18	
Acrylonitrile	µg/kg	<12					<18	
Allyl Chloride	µg/kg							
Benzene	µg/kg	<4.8					<7.4	
Benzene (mobile)	µg/kg		<8	<8	<8	<8		<8
Bromobenzene	µg/kg	<4.8					<7.4	
Bromoform	µg/kg	<4.8					<7.4	
Carbon Disulfide	µg/kg	<4.8					<7.4	
Carbon Tetrachloride	µg/kg	<4.8					<7.4	
Chlorobenzene	µg/kg	<4.8					<7.4	
Chlorodibromomethane	µg/kg	<4.8					<7.4	
Chloroethane	µg/kg	<4.8					<7.4	
Chloroethyl Vinyl Ether,2-	µg/kg	<4.8					<7.4	
Chloroform	µg/kg	<4.8					<7.4	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 19 of 55

	Location ID	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-259	NK-SB-259
	Sample ID	1027093	1027093	1027094	1027095	1027096	1027097	1027097
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	14:10	14:10	14:14	14:20	14:25	14:47	14:47
	Sample Depth	4' - 6'	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'
	Laboratory	AEL	LEA	LEA	LEA	LEA	AEL	LEA
	Lab. Number	AEL97003088	97-1787-287	97-1788-288	97-1790-290	97-1791-291	AEL97003089	97-1792-292
Constituent	Units							
Chloroprene, beta-	µg/kg							
Chlorotoluene, o-	µg/kg	<4.8					<7.4	
Chlorotoluene, p-	µg/kg	<4.8					<7.4	
Dibromomethane	µg/kg	<4.8					<7.4	
Dichlorobenzene, 1,2-	µg/kg	<4.8					<7.4	
Dichlorobenzene, 1,3-	µg/kg	<4.8					<7.4	
Dichlorobenzene, 1,4-	µg/kg	<4.8					<7.4	
Dichlorobromomethane	µg/kg	<4.8					<7.4	
Dichlorodifluoromethane	µg/kg	<9.6					<11	
Dichloroethane, 1,1-	µg/kg	<4.8					<7.4	
Dichloroethane, 1,2-	µg/kg	<4.8					<7.4	
Dichloroethylene, 1,1-	µg/kg	<4.8					<7.4	
Dichloroethylene, 1,2-cis-	µg/kg	<4.8					<7.4	
Dichloroethylene, 1,2-trans-	µg/kg	<4.8					<7.4	
Dichloropropane, 1,2-	µg/kg	<4.8					<7.4	
Dichloropropylene, 1,3-	µg/kg							
Dichloropropylene, 1,3-cis-	µg/kg	<4.8					<7.4	
Dichloropropylene, 1,3-trans-	µg/kg	<4.8					<7.4	
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg	<4.8					<7.4	
Ethylbenzene (mobile)	µg/kg		<16	<17	<17	<17		<17
Ethylene Dibromide	µg/kg							
Hexanone, 2-	µg/kg	<12					<18	
Iodomethane	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg	<4.8					<7.4	
Methyl Chloride	µg/kg	<4.8					<7.4	
Methyl Ethyl Ketone	µg/kg	<12					<18	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 20 of 55

	Location ID	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-258	NK-SB-259	NK-SB-259
	Sample ID	1027093	1027093	1027094	1027095	1027096	1027097	1027097
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997
	Sample Time	14:10	14:10	14:14	14:20	14:25	14:47	14:47
	Sample Depth	4' - 6'	4' - 6'	6' - 8'	8' - 10'	10' - 12'	0' - 2'	0' - 2'
	Laboratory	AEL	LEA	LEA	LEA	LEA	AEL	LEA
	Lab. Number	AEL97003088	97-1787-287	97-1788-288	97-1790-290	97-1791-291	AEL97003089	97-1792-292
Constituent	Units							
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg	<12					<18	
Methyl-tert-butyl Ether	µg/kg	<4.8					<7.4	
Methylene Chloride	µg/kg	<6.0					<11	
Propionitrile	µg/kg							
Styrene	µg/kg	<4.8					<7.4	
Tetrachloroethane, 1,1,1,2-	µg/kg	<4.8					<7.4	
Tetrachloroethane, 1,1,2,2-	µg/kg	<4.8					<7.4	
Tetrachloroethylene	µg/kg	<4.8					11	
Tetrachloroethylene (mobile)	µg/kg		54	10 J	<22	<21		30 E
Toluene	µg/kg	<4.8					<7.4	
Toluene (mobile)	µg/kg		<12	<12	<12	<12		<12
Trichloroethane, 1,1,1-	µg/kg	<4.8					<7.4	
Trichloroethane, 1,1,1- (mobile)	µg/kg		<207	<211	<215	<211		<219
Trichloroethane, 1,1,2-	µg/kg	<4.8					<7.4	
Trichloroethylene	µg/kg	<4.8					<7.4 N1	
Trichloroethylene (mobile)	µg/kg		8 J	<21	<21	<21		9 J
Trichloromonofluoromethane	µg/kg	<4.8					<7.4	
Trichloropropane, 1,2,3-	µg/kg	<4.8					<7.4	
Vinyl Acetate	µg/kg	<4.8					<7.4	
Vinyl Chloride	µg/kg	<4.8					<7.4	
Xylene, o- (mobile)	µg/kg		<22	<22	<23	<22		<23
Xylenes (Total)	µg/kg	<4.8					<7.4	
Xylenes, m- & p- (mobile)	µg/kg		12 E	<11	<11	<11		<12

Notes: 1. Printed on 04/20/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 21 of 55

	Location ID	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-299
	Sample ID	1027098	1027099	1027100	1027100	1027101	1027102	1634061
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	05/21/1997
	Sample Time	14:52	14:55	14:57	14:57	15:04	15:10	11:25
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	4' - 6'
	Laboratory	LEA	LEA	AEL	LEA	LEA	LEA	LEA
	Lab. Number	97-1793-293	97-1794-294	AEL97003090	97-1795-295	97-1796-296	97-1797-297	25-0606-010
Constituent	Units							
Date Metals Analyzed	-			03/18/1997				
Date Organics Analyzed	-	03/06/1997	03/06/1997	03/18/1997	03/06/1997	03/06/1997	03/06/1997	05/22/1997
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg			<0.49				
Barium	mg/kg			29.8				
Cadmium	mg/kg			<3.67				
Chromium	mg/kg			<6.11				
Lead	mg/kg			<24.5				
Mercury	mg/kg			<0.10				
Nickel	mg/kg			<12.2				
Selenium	mg/kg			<1.22				
Silver	mg/kg			<6.11				
Zinc	mg/kg			11.5				
Dibromo-3-chloropropane, 1,2-	µg/kg							
Total Petroleum Hydrocarbons	mg/kg			<42.3				
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 22 of 55

	Location ID	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-299
	Sample ID	1027098	1027099	1027100	1027100	1027101	1027102	1634061
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	05/21/1997
	Sample Time	14:52	14:55	14:57	14:57	15:04	15:10	11:25
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	4' - 6'
	Laboratory	LEA	LEA	AEL	LEA	LEA	LEA	LEA
	Lab. Number	97-1793-293	97-1794-294	AEL97003090	97-1795-295	97-1796-296	97-1797-297	25-0606-010
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							
Dinitrophenol,2,4-	µg/kg							
Dinitrotoluene,2,4-	µg/kg							
Dinitrotoluene,2,6-	µg/kg							
Diphenylhydrazine,1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 23 of 55

	Location ID	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-299
	Sample ID	1027098	1027099	1027100	1027100	1027101	1027102	1634061
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	05/21/1997
	Sample Time	14:52	14:55	14:57	14:57	15:04	15:10	11:25
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	4' - 6'
	Laboratory	LEA	LEA	AEL	LEA	LEA	LEA	LEA
	Lab. Number	97-1793-293	97-1794-294	AEL97003090	97-1795-295	97-1796-296	97-1797-297	25-0606-010
Constituent	Units							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
Naphthalene	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol, 2-	µg/kg							
Nitrophenol, 4-	µg/kg							
Pentachlorophenol	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Propane), 2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Trichlorobenzene, 1,2,4-	µg/kg							
Trichlorophenol, 2,4,6-	µg/kg							
Acetone	µg/kg			<39				
Acrolein	µg/kg			<20				
Acrylonitrile	µg/kg			<20				
Allyl Chloride	µg/kg							
Benzene	µg/kg			<7.8				
Benzene (mobile)	µg/kg	<8	<8		<8	<8	<8	11
Bromobenzene	µg/kg			<7.8				
Bromoform	µg/kg			<7.8				
Carbon Disulfide	µg/kg			<7.8				
Carbon Tetrachloride	µg/kg			<7.8				
Chlorobenzene	µg/kg			<7.8				
Chlorodibromomethane	µg/kg			<7.8				
Chloroethane	µg/kg			<7.8				
Chloroethyl Vinyl Ether, 2-	µg/kg			<7.8				
Chloroform	µg/kg			<7.8				

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 24 of 55

	Location ID	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-299
	Sample ID	1027098	1027099	1027100	1027100	1027101	1027102	1634061
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	05/21/1997
	Sample Time	14:52	14:55	14:57	14:57	15:04	15:10	11:25
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	4' - 6'
	Laboratory	LEA	LEA	AEL	LEA	LEA	LEA	LEA
	Lab. Number	97-1793-293	97-1794-294	AEL97003090	97-1795-295	97-1796-296	97-1797-297	25-0606-010
Constituent	Units							
Chloroprene,beta-	µg/kg							
Chlorotoluene,o-	µg/kg			<7.8				
Chlorotoluene,p-	µg/kg			<7.8				
Dibromomethane	µg/kg			<7.8				
Dichlorobenzene,1,2-	µg/kg			<7.8				
Dichlorobenzene,1,3-	µg/kg			<7.8				
Dichlorobenzene,1,4-	µg/kg			<7.8				
Dichlorobromomethane	µg/kg			<7.8				
Dichlorodifluoromethane	µg/kg			<16				
Dichloroethane,1,1-	µg/kg			<7.8				
Dichloroethane,1,2-	µg/kg			<7.8				
Dichloroethylene,1,1-	µg/kg			<7.8				
Dichloroethylene,1,2-cis-	µg/kg			<7.8				
Dichloroethylene,1,2-trans-	µg/kg			<7.8				
Dichloropropane,1,2-	µg/kg			<7.8				
Dichloropropylene,1,3-	µg/kg							
Dichloropropylene,1,3-cis-	µg/kg			<7.8				
Dichloropropylene,1,3-trans-	µg/kg			<7.8				
Ethyl Methacrylate	µg/kg							
Ethylbenzene	µg/kg			<7.8				
Ethylbenzene (mobile)	µg/kg	<17	<17		<17	<17	<17	<16
Ethylene Dibromide	µg/kg							
Hexanone,2-	µg/kg			<20				
Iodomethane	µg/kg							
Methacrylonitrile	µg/kg							
Methyl Bromide	µg/kg			<7.8				
Methyl Chloride	µg/kg			<7.8				
Methyl Ethyl Ketone	µg/kg			<20				

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 25 of 55

	Location ID	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259	NK-SB-259
	Sample ID	1027098	1027099	1027100	1027100	1027101	1027102	1634061
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	03/04/1997	05/21/1997
	Sample Time	14:52	14:55	14:57	14:57	15:04	15:10	11:25
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	4' - 6'
	Laboratory	LEA	LEA	AEL	LEA	LEA	LEA	LEA
	Lab. Number	97-1793-293	97-1794-294	AEL97003090	97-1795-295	97-1796-296	97-1797-297	25-0606-010
Constituent	Units							
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg			<20				
Methyl-tert-butyl Ether	µg/kg			<7.8				
Methylene Chloride	µg/kg			<9.8				
Propionitrile	µg/kg							
Styrene	µg/kg			<7.8				
Tetrachloroethane, 1,1,1,2-	µg/kg			<7.8				
Tetrachloroethane, 1,1,2,2-	µg/kg			<7.8				
Tetrachloroethylene	µg/kg			<7.8				
Tetrachloroethylene (mobile)	µg/kg	<21	<22		<22	<21	<22	<17
Toluene	µg/kg			<7.8				
Toluene (mobile)	µg/kg	<12	<12		<12	<12	<12	<15
Trichloroethane, 1,1,1-	µg/kg			<7.8				
Trichloroethane, 1,1,1- (mobile)	µg/kg	<211	<219		<215	<211	<215	<267
Trichloroethane, 1,1,2-	µg/kg			<7.8				
Trichloroethylene	µg/kg			<7.8				
Trichloroethylene (mobile)	µg/kg	<21	<22		<21	<21	<21	<26
Trichloromonofluoromethane	µg/kg			<7.8				
Trichloropropane, 1,2,3-	µg/kg			<7.8				
Vinyl Acetate	µg/kg			<7.8				
Vinyl Chloride	µg/kg			<7.8				
Xylene, o- (mobile)	µg/kg	<22	<23		<23	<22	<23	<22
Xylenes (Total)	µg/kg			<7.8				
Xylenes, m- & p- (mobile)	µg/kg	<11	<12		<11	<11	<11	<11

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 26 of 55

	Location ID	NK-SB-299	NK-SB-299	NK-SB-299	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300
	Sample ID	1634061	1634062	1634063	1634064	1634064	1634065	1634065
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	11:25	11:30	11:45	13:00	13:00	13:05	13:05
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'	2' - 4'
	Laboratory	QUAN	LEA	LEA	LEA	QUAN	LEA	QUAN
	Lab. Number	A7E270121004	25-0608-012	25-0609-013	25-0610-014	A7E270121007	25-0611-015	A7E270121008
Constituent	Units							
Date Metals Analyzed	-							
Date Organics Analyzed	-	06/02/1997	05/22/1997	05/22/1997	05/22/1997		05/22/1997	06/02/1997
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg							
Barium	mg/kg							
Cadmium	mg/kg							
Chromium	mg/kg							
Lead	mg/kg							
Mercury	mg/kg							
Nickel	mg/kg							
Selenium	mg/kg							
Silver	mg/kg							
Zinc	mg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg	<5.8 U						<5.8 U
Total Petroleum Hydrocarbons	mg/kg					<63 U		<58 U
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 27 of 55

	Location ID	NK-SB-299	NK-SB-299	NK-SB-299	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300
	Sample ID	1634061	1634062	1634063	1634064	1634064	1634065	1634065
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	11:25	11:30	11:45	13:00	13:00	13:05	13:05
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'	2' - 4'
	Laboratory	QUAN	LEA	LEA	LEA	QUAN	LEA	QUAN
	Lab. Number	A7E270121004	25-0608-012	25-0609-013	25-0610-014	A7E270121007	25-0611-015	A7E270121008
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene, 2-	µg/kg							
Chlorophenol, 2-	µg/kg							
Chlorophenyl Phenyl Ether, 4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene, 1,4-trans-	µg/kg	<5.8 U						<5.8 U
Dichlorobenzidine, 3,3'-	µg/kg							
Dichlorophenol, 2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol, 2,4-	µg/kg							
Dinitro-o-cresol, 4,6-	µg/kg							
Dinitrophenol, 2,4-	µg/kg							
Dinitrotoluene, 2,4-	µg/kg							
Dinitrotoluene, 2,6-	µg/kg							
Diphenylhydrazine, 1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 28 of 55

	Location ID	NK-SB-299	NK-SB-299	NK-SB-299	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300
	Sample ID	1634061	1634062	1634063	1634064	1634064	1634065	1634065
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	11:25	11:30	11:45	13:00	13:00	13:05	13:05
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'	2' - 4'
	Laboratory	QUAN	LEA	LEA	LEA	QUAN	LEA	QUAN
	Lab. Number	A7E270121004	25-0608-012	25-0609-013	25-0610-014	A7E270121007	25-0611-015	A7E270121008
Constituent	Units							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
Naphthalene	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol, 2-	µg/kg							
Nitrophenol, 4-	µg/kg							
Pentachlorophenol	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Propane), 2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Trichlorobenzene, 1,2,4-	µg/kg							
Trichlorophenol, 2,4,6-	µg/kg							
Acetone	µg/kg	<120 U						59 J
Acrolein	µg/kg							
Acrylonitrile	µg/kg	<120 U						<120 U
Allyl Chloride	µg/kg	<120 U						<120 U
Benzene	µg/kg	<5.8 U						<5.8 U
Benzene (mobile)	µg/kg		<15	<14	<15		<16	
Bromobenzene	µg/kg							
Bromoform	µg/kg	<5.8 U						<5.8 U
Carbon Disulfide	µg/kg	<5.8 U						<5.8 U
Carbon Tetrachloride	µg/kg	<5.8 U						<5.8 U
Chlorobenzene	µg/kg	<5.8 U						<5.8 U
Chlorodibromomethane	µg/kg	<5.8 U						<5.8 U
Chloroethane	µg/kg	<12 U						<12 U
Chloroethyl Vinyl Ether, 2-	µg/kg							
Chloroform	µg/kg	<5.8 U						<5.8 U

Notes: 1. Printed on 04/20/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 29 of 55

	Location ID	NK-SB-299	NK-SB-299	NK-SB-299	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300
	Sample ID	1634061	1634062	1634063	1634064	1634064	1634065	1634065
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	11:25	11:30	11:45	13:00	13:00	13:05	13:05
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'	2' - 4'
	Laboratory	QUAN	LEA	LEA	LEA	QUAN	LEA	QUAN
	Lab. Number	A7E270121004	25-0608-012	25-0609-013	25-0610-014	A7E270121007	25-0611-015	A7E270121008
Constituent	Units							
Chloroprene, beta-	µg/kg	<5.8 U						<5.8 U
Chlorotoluene, o-	µg/kg							
Chlorotoluene, p-	µg/kg							
Dibromomethane	µg/kg	<5.8 U						<5.8 U
Dichlorobenzene, 1,2-	µg/kg							
Dichlorobenzene, 1,3-	µg/kg							
Dichlorobenzene, 1,4-	µg/kg							
Dichlorobromomethane	µg/kg	<5.8 U						<5.8 U
Dichlorodifluoromethane	µg/kg	<5.8 U						<5.8 U
Dichloroethane, 1,1-	µg/kg	<5.8 U						<5.8 U
Dichloroethane, 1,2-	µg/kg	<5.8 U						<5.8 U
Dichloroethylene, 1,1-	µg/kg	<5.8 U						<5.8 U
Dichloroethylene, 1,2-cis-	µg/kg	<5.8 U						<5.8 U
Dichloroethylene, 1,2-trans-	µg/kg	<5.8 U						<5.8 U
Dichloropropane, 1,2-	µg/kg	<5.8 U						<5.8 U
Dichloropropylene, 1,3-	µg/kg	<5.8 U						<5.8 U
Dichloropropylene, 1,3-cis-	µg/kg							
Dichloropropylene, 1,3-trans-	µg/kg							
Ethyl Methacrylate	µg/kg	<5.8 U						<5.8 U
Ethylbenzene	µg/kg	<5.8 U						<5.8 U
Ethylbenzene (mobile)	µg/kg		<21	<20	<22		<23	
Ethylene Dibromide	µg/kg	<5.8 U						<5.8 U
Hexanone, 2-	µg/kg	<5.8 U						<5.8 U
Iodomethane	µg/kg	<5.8 U J						<5.8 U J
Methacrylonitrile	µg/kg	<5.8 U						<5.8 U
Methyl Bromide	µg/kg	<12 U J						<12 U J
Methyl Chloride	µg/kg	<12 U						<12 U
Methyl Ethyl Ketone	µg/kg	<120 U						<120 U

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 30 of 55

	Location ID	NK-SB-299	NK-SB-299	NK-SB-299	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300
	Sample ID	1634061	1634062	1634063	1634064	1634064	1634065	1634065
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	11:25	11:30	11:45	13:00	13:00	13:05	13:05
	Sample Depth	4' - 6'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'	2' - 4'
	Laboratory	QUAN	LEA	LEA	LEA	QUAN	LEA	QUAN
	Lab. Number	A7E270121004	25-0608-012	25-0609-013	25-0610-014	A7E270121007	25-0611-015	A7E270121008
Constituent	Units							
Methyl Methacrylate	µg/kg	<5.8 U						<5.8 U
Methyl-2-pentanone, 4-	µg/kg	<12 U						<12 U
Methyl-tert-butyl Ether	µg/kg	<5.8 U						<5.8 U
Methylene Chloride	µg/kg	7.5						<5.8 U
Propionitrile	µg/kg	<23 U						<23 U
Styrene	µg/kg	<5.8 U						<5.8 U
Tetrachloroethane, 1,1,1,2-	µg/kg	<5.8 U						<5.8 U
Tetrachloroethane, 1,1,2,2-	µg/kg	<5.8 U						<5.8 U
Tetrachloroethylene	µg/kg	<5.8 U						<5.8 U
Tetrachloroethylene (mobile)	µg/kg		<22	<21	<23		<24	
Toluene	µg/kg	<5.8 U						<5.8 U
Toluene (mobile)	µg/kg		<21	<20	<21		<23	
Trichloroethane, 1,1,1-	µg/kg	<5.8 U						<5.8 U
Trichloroethane, 1,1,1- (mobile)	µg/kg		<355	<342	<368		<390	
Trichloroethane, 1,1,2-	µg/kg	<5.8 U						<5.8 U
Trichloroethylene	µg/kg	<5.8 U						<5.8 U
Trichloroethylene (mobile)	µg/kg		<34	<33	<36		<38	
Trichloromonofluoromethane	µg/kg	<5.8 U						<5.8 U
Trichloropropane, 1,2,3-	µg/kg	<5.8 U						<5.8 U
Vinyl Acetate	µg/kg	<5.8 U J						<5.8 U J
Vinyl Chloride	µg/kg	<12 U						<12 U
Xylene, o- (mobile)	µg/kg		<29	<28	<30		<32	
Xylenes (Total)	µg/kg	<5.8 U						<5.8 U
Xylenes, m- & p- (mobile)	µg/kg		<15	<15	<16		<17	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 31 of 55

	Location ID	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-301	NK-SB-301	NK-SB-301
	Sample ID	1634066	1634067	1634067	1634068	1634069	1634069	1634070
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	13:20	13:25	13:25	13:50	14:15	14:15	14:15
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	QUAN	LEA	LEA	QUAN	LEA
	Lab. Number	25-0612-016	25-0613-017	A7E270121010	25-0614-018	25-0615-019	A7E270121012	25-0617-021
Constituent	Units							
Date Metals Analyzed	-							
Date Organics Analyzed	-	05/22/1997	05/22/1997	06/02/1997	05/22/1997	05/22/1997		05/22/1997
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg							
Barium	mg/kg							
Cadmium	mg/kg							
Chromium	mg/kg							
Lead	mg/kg							
Mercury	mg/kg							
Nickel	mg/kg							
Selenium	mg/kg							
Silver	mg/kg							
Zinc	mg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg			<5.8 U				
Total Petroleum Hydrocarbons	mg/kg						120	
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 32 of 55

	Location ID	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-301	NK-SB-301	NK-SB-301
	Sample ID	1634066	1634067	1634067	1634068	1634069	1634069	1634070
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	13:20	13:25	13:25	13:50	14:15	14:15	14:15
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	QUAN	LEA	LEA	QUAN	LEA
	Lab. Number	25-0612-016	25-0613-017	A7E270121010	25-0614-018	25-0615-019	A7E270121012	25-0617-021
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg			LSU				
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							
Dinitrophenol,2,4-	µg/kg							
Dinitrotoluene,2,4-	µg/kg							
Dinitrotoluene,2,6-	µg/kg							
Diphenylhydrazine,1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 33 of 55

	Location ID	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-301	NK-SB-301	NK-SB-301
	Sample ID	1634066	1634067	1634067	1634068	1634069	1634069	1634070
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	13:20	13:25	13:25	13:50	14:15	14:15	14:15
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	QUAN	LEA	LEA	QUAN	LEA
	Lab. Number	25-0612-016	25-0613-017	A7E270121010	25-0614-018	25-0615-019	A7E270121012	25-0617-021
Constituent	Units							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
Naphthalene	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol,2-	µg/kg							
Nitrophenol,4-	µg/kg							
Pentachlorophenol	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Propane),2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Acetone	µg/kg			50 J				
Acrolein	µg/kg							
Acrylonitrile	µg/kg			<120 U				
Allyl Chloride	µg/kg			<120 U				
Benzene	µg/kg			<5.8 U				
Benzene (mobile)	µg/kg	<16	<17		<16	<11		<15
Bromobenzene	µg/kg							
Bromoform	µg/kg			<5.8 U				
Carbon Disulfide	µg/kg			<5.8 U				
Carbon Tetrachloride	µg/kg			<5.8 U				
Chlorobenzene	µg/kg			<5.8 U				
Chlorodibromomethane	µg/kg			<5.8 U				
Chloroethane	µg/kg			<12 U				
Chloroethyl Vinyl Ether,2-	µg/kg							
Chloroform	µg/kg			<5.8 U				

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 34 of 55

	Location ID	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-301	NK-SB-301	NK-SB-301
	Sample ID	1634066	1634067	1634067	1634068	1634069	1634069	1634070
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	13:20	13:25	13:25	13:50	14:15	14:15	14:15
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	QUAN	LEA	LEA	QUAN	LEA
	Lab. Number	25-0612-016	25-0613-017	A7E270121010	25-0614-018	25-0615-019	A7E270121012	25-0617-021
Constituent	Units							
Chloroprene,beta-	µg/kg			<5.8 U				
Chlorotoluene,o-	µg/kg							
Chlorotoluene,p-	µg/kg							
Dibromomethane	µg/kg			<5.8 U				
Dichlorobenzene,1,2-	µg/kg							
Dichlorobenzene,1,3-	µg/kg							
Dichlorobenzene,1,4-	µg/kg							
Dichlorobromomethane	µg/kg			<5.8 U				
Dichlorodifluoromethane	µg/kg			<5.8 U				
Dichloroethane,1,1-	µg/kg			<5.8 U				
Dichloroethane,1,2-	µg/kg			<5.8 U				
Dichloroethylene,1,1-	µg/kg			<5.8 U				
Dichloroethylene,1,2-cis-	µg/kg			<5.8 U				
Dichloroethylene,1,2-trans-	µg/kg			<5.8 U				
Dichloropropane,1,2-	µg/kg			<5.8 U				
Dichloropropylene,1,3-	µg/kg			<5.8 U				
Dichloropropylene,1,3-cis-	µg/kg							
Dichloropropylene,1,3-trans-	µg/kg							
Ethyl Methacrylate	µg/kg			<5.8 U				
Ethylbenzene	µg/kg			<5.8 U				
Ethylbenzene (mobile)	µg/kg	<23	<25		<23	<16		<22
Ethylene Dibromide	µg/kg			<5.8 U				
Hexanone,2-	µg/kg			<5.8 U				
Iodomethane	µg/kg			<5.8 U J				
Methacrylonitrile	µg/kg			<5.8 U				
Methyl Bromide	µg/kg			<12 U J				
Methyl Chloride	µg/kg			<12 U				
Methyl Ethyl Ketone	µg/kg			<120 U				

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 35 of 55

	Location ID	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-300	NK-SB-301	NK-SB-301	NK-SB-301
	Sample ID	1634066	1634067	1634067	1634068	1634069	1634069	1634070
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997
	Sample Time	13:20	13:25	13:25	13:50	14:15	14:15	14:15
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'	2' - 4'
	Laboratory	LEA	LEA	QUAN	LEA	LEA	QUAN	LEA
	Lab. Number	25-0612-016	25-0613-017	A7E270121010	25-0614-018	25-0615-019	A7E270121012	25-0617-021
Constituent	Units							
Methyl Methacrylate	µg/kg			<5.8 U				
Methyl-2-pentanone,4-	µg/kg			<12 U				
Methyl-tert-butyl Ether	µg/kg			<5.8 U				
Methylene Chloride	µg/kg			6.4				
Propionitrile	µg/kg			<23 U				
Styrene	µg/kg			<5.8 U				
Tetrachloroethane,1,1,1,2-	µg/kg			<5.8 U				
Tetrachloroethane,1,1,2,2-	µg/kg			<5.8 U				
Tetrachloroethylene	µg/kg			<5.8 U				
Tetrachloroethylene (mobile)	µg/kg	<24	<26		<24	<17		<23
Toluene	µg/kg			<5.8 U				
Toluene (mobile)	µg/kg	<23	<24		<23	<16		<21
Trichloroethane,1,1,1-	µg/kg			<5.8 U				
Trichloroethane,1,1,1- (mobile)	µg/kg	<390	<415		<390	<271		<368
Trichloroethane,1,1,2-	µg/kg			<5.8 U				
Trichloroethylene	µg/kg			<5.8 U				
Trichloroethylene (mobile)	µg/kg	<38	<40		<38	<26		<36
Trichloromonofluoromethane	µg/kg			<5.8 U				
Trichloropropane,1,2,3-	µg/kg			<5.8 U				
Vinyl Acetate	µg/kg			<5.8 U J				
Vinyl Chloride	µg/kg			<12 U				
Xylene,o- (mobile)	µg/kg	<32	<34		<32	<22		<30
Xylenes (Total)	µg/kg			<5.8 U				
Xylenes,m- & p- (mobile)	µg/kg	<17	<18		<17	<12		<16

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 36 of 55

	Location ID	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-302	NK-SB-302
	Sample ID	1634070	1634071	1634072	1634072	1634073	1634076	1634076
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/22/1997	05/22/1997
	Sample Time	14:15	14:30	14:35	14:35	14:45	09:55	09:55
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	A7E270121013	25-0618-022	25-0619-023	A7E270121015	25-0620-024	25-0627-031	A7E290112002
Constituent	Units							
Date Metals Analyzed	-							
Date Organics Analyzed	-	06/02/1997	05/22/1997	05/22/1997	06/02/1997	05/22/1997	05/23/1997	
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg							
Barium	mg/kg							
Cadmium	mg/kg							
Chromium	mg/kg							
Lead	mg/kg							
Mercury	mg/kg							
Nickel	mg/kg							
Selenium	mg/kg							
Silver	mg/kg							
Zinc	mg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg	<5.8 U			<5.9 U			
Total Petroleum Hydrocarbons	mg/kg	<58 U						<62 U
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benztidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 37 of 55

	Location ID	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-302	NK-SB-302
	Sample ID	1634070	1634071	1634072	1634072	1634073	1634076	1634076
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/22/1997	05/22/1997
	Sample Time	14:15	14:30	14:35	14:35	14:45	09:55	09:55
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	A7E270121013	25-0618-022	25-0619-023	A7E270121015	25-0620-024	25-0627-031	A7E290112002
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg	<5.8 U			<5.9 U			
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							
Dinitrophenol,2,4-	µg/kg							
Dinitrotoluene,2,4-	µg/kg							
Dinitrotoluene,2,6-	µg/kg							
Diphenylhydrazine,1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 38 of 55

	Location ID	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-302	NK-SB-302
	Sample ID	1634070	1634071	1634072	1634072	1634073	1634076	1634076
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/22/1997	05/22/1997
	Sample Time	14:15	14:30	14:35	14:35	14:45	09:55	09:55
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	A7E270121013	25-0618-022	25-0619-023	A7E270121015	25-0620-024	25-0627-031	A7E290112002
Constituent	Units							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
Naphthalene	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol,2-	µg/kg							
Nitrophenol,4-	µg/kg							
Pentachlorophenol	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Propane),2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Acetone	µg/kg	49 J			34 J			
Acrolein	µg/kg							
Acrylonitrile	µg/kg	<120 U			<120 U			
Allyl Chloride	µg/kg	<120 U			<120 U			
Benzene	µg/kg	<5.8 U			<5.9 U			
Benzene (mobile)	µg/kg		<13	<11		<11	<14	
Bromobenzene	µg/kg							
Bromoform	µg/kg	<5.8 U			<5.9 U			
Carbon Disulfide	µg/kg	<5.8 U			<5.9 U			
Carbon Tetrachloride	µg/kg	<5.8 U			<5.9 U			
Chlorobenzene	µg/kg	<5.8 U			<5.9 U			
Chlorodibromomethane	µg/kg	<5.8 U			<5.9 U			
Chloroethane	µg/kg	<12 U			<12 U			
Chloroethyl Vinyl Ether,2-	µg/kg							
Chloroform	µg/kg	<5.8 U			<5.9 U			

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 39 of 55

	Location ID	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-302	NK-SB-302
	Sample ID	1634070	1634071	1634072	1634072	1634073	1634076	1634076
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/22/1997	05/22/1997
	Sample Time	14:15	14:30	14:35	14:35	14:45	09:55	09:55
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	A7E270121013	25-0618-022	25-0619-023	A7E270121015	25-0620-024	25-0627-031	A7E290112002
Constituent	Units							
Chloroprene, beta-	µg/kg	<5.8 U			<5.9 U			
Chlorotoluene, o-	µg/kg							
Chlorotoluene, p-	µg/kg							
Dibromomethane	µg/kg	<5.8 U			<5.9 U			
Dichlorobenzene, 1,2-	µg/kg							
Dichlorobenzene, 1,3-	µg/kg							
Dichlorobenzene, 1,4-	µg/kg							
Dichlorobromomethane	µg/kg	<5.8 U			<5.9 U			
Dichlorodifluoromethane	µg/kg	<5.8 U			<5.9 U			
Dichloroethane, 1,1-	µg/kg	<5.8 U			<5.9 U			
Dichloroethane, 1,2-	µg/kg	<5.8 U			<5.9 U			
Dichloroethylene, 1,1-	µg/kg	<5.8 U			<5.9 U			
Dichloroethylene, 1,2-cis-	µg/kg	<5.8 U			<5.9 U			
Dichloroethylene, 1,2-trans-	µg/kg	<5.8 U			<5.9 U			
Dichloropropane, 1,2-	µg/kg	<5.8 U			<5.9 U			
Dichloropropylene, 1,3-	µg/kg	<5.8 U			<5.9 U			
Dichloropropylene, 1,3-cis-	µg/kg							
Dichloropropylene, 1,3-trans-	µg/kg							
Ethyl Methacrylate	µg/kg	<5.8 U			<5.9 U			
Ethylbenzene	µg/kg	<5.8 U			<5.9 U			
Ethylbenzene (mobile)	µg/kg		<18	<16		<16	<20	
Ethylene Dibromide	µg/kg	<5.8 U			<5.9 U			
Hexanone, 2-	µg/kg	<5.8 U			<5.9 U			
Iodomethane	µg/kg	<5.8 U J			<5.9 U J			
Methacrylonitrile	µg/kg	<5.8 U			<5.9 U			
Methyl Bromide	µg/kg	<12 U J			<12 U J			
Methyl Chloride	µg/kg	<12 U			<12 U			
Methyl Ethyl Ketone	µg/kg	<120 U			<120 U			

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 40 of 55

	Location ID	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-301	NK-SB-302	NK-SB-302
	Sample ID	1634070	1634071	1634072	1634072	1634073	1634076	1634076
	Sample Date	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/21/1997	05/22/1997	05/22/1997
	Sample Time	14:15	14:30	14:35	14:35	14:45	09:55	09:55
	Sample Depth	2' - 4'	4' - 6'	6' - 8'	6' - 8'	8' - 10'	0' - 2'	0' - 2'
	Laboratory	QUAN	LEA	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	A7E270121013	25-0618-022	25-0619-023	A7E270121015	25-0620-024	25-0627-031	A7E290112002
Constituent	Units							
Methyl Methacrylate	µg/kg	<5.8 U			<5.9 U			
Methyl-2-pentanone, 4-	µg/kg	<12 U			<12 U			
Methyl-tert-butyl Ether	µg/kg	<5.8 U			<5.9 U			
Methylene Chloride	µg/kg	<5.8 U			2.4 J			
Propionitrile	µg/kg	<23 U			<24 U			
Styrene	µg/kg	<5.8 U			<5.9 U			
Tetrachloroethane, 1,1,1,2-	µg/kg	<5.8 U			<5.9 U			
Tetrachloroethane, 1,1,2,2-	µg/kg	<5.8 U			<5.9 U			
Tetrachloroethylene	µg/kg	<5.8 U			<5.9 U			
Tetrachloroethylene (mobile)	µg/kg		<19	<17		<17	<21	
Toluene	µg/kg	<5.8 U			<5.9 U			
Toluene (mobile)	µg/kg		<18	<15		<15	<20	
Trichloroethane, 1,1,1-	µg/kg	<5.8 U			<5.9 U			
Trichloroethane, 1,1,1- (mobile)	µg/kg		<310	<267		<267	<342	
Trichloroethane, 1,1,2-	µg/kg	<5.8 U			<5.9 U			
Trichloroethylene	µg/kg	<5.8 U			<5.9 U			
Trichloroethylene (mobile)	µg/kg		<30	<26		<26	<33	
Trichloromonofluoromethane	µg/kg	<5.8 U			<5.9 U			
Trichloropropane, 1,2,3-	µg/kg	<5.8 U			<5.9 U			
Vinyl Acetate	µg/kg	<5.8 U J			<5.9 U J			
Vinyl Chloride	µg/kg	<12 U			<12 U			
Xylene, o- (mobile)	µg/kg		<25	<22		<22	<28	
Xylenes (Total)	µg/kg	<5.8 U			<5.9 U			
Xylenes, m- & p- (mobile)	µg/kg		<13	<11		<11	<15	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 41 of 55

	Location ID	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302
	Sample ID	1634077	1634077	1634078	1634079	1634079	1634080	1634081
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	10:00	10:00	10:05	10:25	10:25	10:30	10:40
	Sample Depth	2' - 4'	2' - 4'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	QUAN	LEA	LEA
	Lab. Number	25-0628-032	A7E290112003	25-0629-033	25-0630-034	A7E290112005	25-0631-035	25-0632-036
Constituent	Units							
Date Metals Analyzed	-							
Date Organics Analyzed	-	05/23/1997		05/23/1997	05/23/1997	06/04/1997	05/23/1997	05/23/1997
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg							
Barium	mg/kg							
Cadmium	mg/kg							
Chromium	mg/kg							
Lead	mg/kg							
Mercury	mg/kg							
Nickel	mg/kg							
Selenium	mg/kg							
Silver	mg/kg							
Zinc	mg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg					<5.9 U		
Total Petroleum Hydrocarbons	mg/kg		<58 U					
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 42 of 55

	Location ID	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302
	Sample ID	1634077	1634077	1634078	1634079	1634079	1634080	1634081
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	10:00	10:00	10:05	10:25	10:25	10:30	10:40
	Sample Depth	2' - 4'	2' - 4'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	QUAN	LEA	LEA
	Lab. Number	25-0628-032	A7E290112003	25-0629-033	25-0630-034	A7E290112005	25-0631-035	25-0632-036
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg					<3.9 U		
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							
Dinitrophenol,2,4-	µg/kg							
Dinitrotoluene,2,4-	µg/kg							
Dinitrotoluene,2,6-	µg/kg							
Diphenylhydrazine,1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 43 of 55

	Location ID	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302
	Sample ID	1634077	1634077	1634078	1634079	1634079	1634080	1634081
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	10:00	10:00	10:05	10:25	10:25	10:30	10:40
	Sample Depth	2' - 4'	2' - 4'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	QUAN	LEA	LEA
	Lab. Number	25-0628-032	A7E290112003	25-0629-033	25-0630-034	A7E290112005	25-0631-035	25-0632-036
Constituent	Units							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
Naphthalene	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol,2-	µg/kg							
Nitrophenol,4-	µg/kg							
Pentachlorophenol	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Propane),2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Acetone	µg/kg					<120 U		
Acrolein	µg/kg							
Acrylonitrile	µg/kg					<120 U		
Allyl Chloride	µg/kg					<120 U		
Benzene	µg/kg					<5.9 U		
Benzene (mobile)	µg/kg	<12		<13	<14		<14	<14
Bromobenzene	µg/kg							
Bromoform	µg/kg					<5.9 U		
Carbon Disulfide	µg/kg					<5.9 U		
Carbon Tetrachloride	µg/kg					<5.9 U		
Chlorobenzene	µg/kg					<5.9 U		
Chlorodibromomethane	µg/kg					<5.9 U		
Chloroethane	µg/kg					<12 U		
Chloroethyl Vinyl Ether,2-	µg/kg							
Chloroform	µg/kg					<5.9 U		

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 44 of 55

Location ID	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302
Sample ID	1634077	1634077	1634078	1634079	1634079	1634079	1634080	1634081
Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
Sample Time	10:00	10:00	10:05	10:25	10:25	10:25	10:30	10:40
Sample Depth	2' - 4'	2' - 4'	2' - 4'	4' - 6'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
Laboratory	LEA	QUAN	LEA	LEA	QUAN	QUAN	LEA	LEA
Lab. Number	25-0628-032	A7E290112003	25-0629-033	25-0630-034	A7E290112005	A7E290112005	25-0631-035	25-0632-036
Constituent	Units							
Chloroprene, beta-	µg/kg					<5.9 U		
Chlorotoluene, o-	µg/kg							
Chlorotoluene, p-	µg/kg							
Dibromomethane	µg/kg					<5.9 U		
Dichlorobenzene, 1,2-	µg/kg							
Dichlorobenzene, 1,3-	µg/kg							
Dichlorobenzene, 1,4-	µg/kg							
Dichlorobromomethane	µg/kg					<5.9 U		
Dichlorodifluoromethane	µg/kg					<5.9 U		
Dichloroethane, 1,1-	µg/kg					<5.9 U		
Dichloroethane, 1,2-	µg/kg					<5.9 U		
Dichloroethylene, 1,1-	µg/kg					<5.9 U		
Dichloroethylene, 1,2-cis-	µg/kg					<5.9 U		
Dichloroethylene, 1,2-trans-	µg/kg					<5.9 U		
Dichloropropane, 1,2-	µg/kg					<5.9 U		
Dichloropropylene, 1,3-	µg/kg					<5.9 U		
Dichloropropylene, 1,3-cis-	µg/kg							
Dichloropropylene, 1,3-trans-	µg/kg							
Ethyl Methacrylate	µg/kg					<5.9 U		
Ethylbenzene	µg/kg					<5.9 U		
Ethylbenzene (mobile)	µg/kg	<18		<19	<21		<20	<20
Ethylene Dibromide	µg/kg					<5.9 U		
Hexanone, 2-	µg/kg					<5.9 U		
Iodomethane	µg/kg					<5.9 U		
Methacrylonitrile	µg/kg					<5.9 U		
Methyl Bromide	µg/kg					<12 U J		
Methyl Chloride	µg/kg					<12 U		
Methyl Ethyl Ketone	µg/kg					<120 U		

Notes: 1. Printed on 04/20/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 45 of 55

	Location ID	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302	NK-SB-302
	Sample ID	1634077	1634077	1634078	1634079	1634079	1634080	1634081
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	10:00	10:00	10:05	10:25	10:25	10:30	10:40
	Sample Depth	2' - 4'	2' - 4'	2' - 4'	4' - 6'	4' - 6'	6' - 8'	8' - 10'
	Laboratory	LEA	QUAN	LEA	LEA	QUAN	LEA	LEA
	Lab. Number	25-0628-032	A7E290112003	25-0629-033	25-0630-034	A7E290112005	25-0631-035	25-0632-036
Constituent	Units							
Methyl Methacrylate	µg/kg					<5.9 U		
Methyl-2-pentanone, 4-	µg/kg					<12 U		
Methyl-tert-butyl Ether	µg/kg					<5.9 U		
Methylene Chloride	µg/kg					9.1		
Propionitrile	µg/kg					<24 U		
Styrene	µg/kg					<5.9 U		
Tetrachloroethane, 1,1,1,2-	µg/kg					<5.9 U		
Tetrachloroethane, 1,1,2,2-	µg/kg					<5.9 U		
Tetrachloroethylene	µg/kg					<5.9 U		
Tetrachloroethylene (mobile)	µg/kg	<18		<20	<22		<21	<21
Toluene	µg/kg					<5.9 U		
Toluene (mobile)	µg/kg	<17		<19	<20		<19	<19
Trichloroethane, 1,1,1-	µg/kg					<5.9 U		
Trichloroethane, 1,1,1- (mobile)	µg/kg	<295		<325	<348		<336	<336
Trichloroethane, 1,1,2-	µg/kg					<5.9 U		
Trichloroethylene	µg/kg					<5.9 U		
Trichloroethylene (mobile)	µg/kg	<29		<32	<34		<33	<33
Trichloromonofluoromethane	µg/kg					<5.9 U		
Trichloropropane, 1,2,3-	µg/kg					<5.9 U		
Vinyl Acetate	µg/kg					<5.9 U J		
Vinyl Chloride	µg/kg					<12 U		
Xylene, o- (mobile)	µg/kg	<24		<27	<28		<27	<27
Xylenes (Total)	µg/kg					<5.9 U		
Xylenes, m- & p- (mobile)	µg/kg	<13		<14	<15		<14	<14

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 46 of 55

	Location ID	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303
	Sample ID	1634082	1634082	1634083	1634083	1634084	1634085	1634085
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	11:15	11:15	11:20	11:20	11:35	11:40	11:40
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	6' - 8'
	Laboratory	LEA	QUAN	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	25-0633-037	A7E290112008	25-0634-038	A7E290112009	25-0635-039	25-0636-040	A7E290112011
Constituent	Units							
Date Metals Analyzed	-							
Date Organics Analyzed	-	05/23/1997		05/23/1997		05/23/1997	05/23/1997	06/05/1997
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg							
Barium	mg/kg							
Cadmium	mg/kg							
Chromium	mg/kg							
Lead	mg/kg							
Mercury	mg/kg							
Nickel	mg/kg							
Selenium	mg/kg							
Silver	mg/kg							
Zinc	mg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg							<6.0 U
Total Petroleum Hydrocarbons	mg/kg		<60 U		<57 U			
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 47 of 55

	Location ID	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303
	Sample ID	1634082	1634082	1634083	1634083	1634084	1634085	1634085
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	11:15	11:15	11:20	11:20	11:35	11:40	11:40
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	6' - 8'
	Laboratory	LEA	QUAN	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	25-0633-037	A7E290112008	25-0634-038	A7E290112009	25-0635-039	25-0636-040	A7E290112011
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene,2-	µg/kg							
Chlorophenol,2-	µg/kg							
Chlorophenyl Phenyl Ether,4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene,1,4-trans-	µg/kg							<6.0 U
Dichlorobenzidine,3,3'-	µg/kg							
Dichlorophenol,2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol,2,4-	µg/kg							
Dinitro-o-cresol,4,6-	µg/kg							
Dinitrophenol,2,4-	µg/kg							
Dinitrotoluene,2,4-	µg/kg							
Dinitrotoluene,2,6-	µg/kg							
Diphenylhydrazine,1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 48 of 55

	Location ID	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303
	Sample ID	1634082	1634082	1634083	1634083	1634084	1634085	1634085
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	11:15	11:15	11:20	11:20	11:35	11:40	11:40
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	6' - 8'
	Laboratory	LEA	QUAN	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	25-0633-037	A7E290112008	25-0634-038	A7E290112009	25-0635-039	25-0636-040	A7E290112011
Constituent	Units							
N-nitrosodimethylamine	µg/kg							
N-nitrosodiphenylamine	µg/kg							
Naphthalene	µg/kg							
Nitrobenzene	µg/kg							
Nitrophenol,2-	µg/kg							
Nitrophenol,4-	µg/kg							
Pentachlorophenol	µg/kg							
Phenanthrene	µg/kg							
Phenol	µg/kg							
Propane),2,2'-oxybis(2-chloro-	µg/kg							
Pyrene	µg/kg							
Trichlorobenzene,1,2,4-	µg/kg							
Trichlorophenol,2,4,6-	µg/kg							
Acetone	µg/kg							43 J
Acrolein	µg/kg							
Acrylonitrile	µg/kg							<120 U
Allyl Chloride	µg/kg							<120 U
Benzene	µg/kg							<6.0 U
Benzene (mobile)	µg/kg	<11		<13		<13	<12	
Bromobenzene	µg/kg							
Bromoform	µg/kg							<6.0 U
Carbon Disulfide	µg/kg							<6.0 U
Carbon Tetrachloride	µg/kg							<6.0 U
Chlorobenzene	µg/kg							<6.0 U
Chlorodibromomethane	µg/kg							<6.0 U
Chloroethane	µg/kg							<12 U
Chloroethyl Vinyl Ether,2-	µg/kg							
Chloroform	µg/kg							<6.0 U

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 49 of 55

	Location ID	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303
	Sample ID	1634082	1634082	1634083	1634083	1634084	1634085	1634085
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	11:15	11:15	11:20	11:20	11:35	11:40	11:40
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	6' - 8'
	Laboratory	LEA	QUAN	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	25-0633-037	A7E290112008	25-0634-038	A7E290112009	25-0635-039	25-0636-040	A7E290112011
Constituent	Units							
Chloroprene, beta-	µg/kg							<6.0 U
Chlorotoluene, o-	µg/kg							
Chlorotoluene, p-	µg/kg							
Dibromomethane	µg/kg							<6.0 U
Dichlorobenzene, 1,2-	µg/kg							
Dichlorobenzene, 1,3-	µg/kg							
Dichlorobenzene, 1,4-	µg/kg							
Dichlorobromomethane	µg/kg							<6.0 U
Dichlorodifluoromethane	µg/kg							<6.0 U
Dichloroethane, 1,1-	µg/kg							<6.0 U
Dichloroethane, 1,2-	µg/kg							<6.0 U
Dichloroethylene, 1,1-	µg/kg							<6.0 U
Dichloroethylene, 1,2-cis-	µg/kg							<6.0 U
Dichloroethylene, 1,2-trans-	µg/kg							<6.0 U
Dichloropropane, 1,2-	µg/kg							<6.0 U
Dichloropropylene, 1,3-	µg/kg							<6.0 U
Dichloropropylene, 1,3-cis-	µg/kg							
Dichloropropylene, 1,3-trans-	µg/kg							
Ethyl Methacrylate	µg/kg							<6.0 U
Ethylbenzene	µg/kg							<6.0 U
Ethylbenzene (mobile)	µg/kg	<16		<19		<18	<17	
Ethylene Dibromide	µg/kg							<6.0 U
Hexanone, 2-	µg/kg							<60 U
Iodomethane	µg/kg							<6.0 U J
Methacrylonitrile	µg/kg							<6.0 U
Methyl Bromide	µg/kg							<12 U J
Methyl Chloride	µg/kg							<12 U
Methyl Ethyl Ketone	µg/kg							<120 U

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 50 of 55

	Location ID	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303	NK-SB-303
	Sample ID	1634082	1634082	1634083	1634083	1634084	1634085	1634085
	Sample Date	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997	05/22/1997
	Sample Time	11:15	11:15	11:20	11:20	11:35	11:40	11:40
	Sample Depth	0' - 2'	0' - 2'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	6' - 8'
	Laboratory	LEA	QUAN	LEA	QUAN	LEA	LEA	QUAN
	Lab. Number	25-0633-037	A7E290112008	25-0634-038	A7E290112009	25-0635-039	25-0636-040	A7E290112011
Constituent	Units							
Methyl Methacrylate	µg/kg							<6.0 U
Methyl-2-pentanone,4-	µg/kg							<12 U
Methyl-tert-butyl Ether	µg/kg							<6.0 U
Methylene Chloride	µg/kg							<6.0 U
Propionitrile	µg/kg							<24 U
Styrene	µg/kg							<6.0 U
Tetrachloroethane,1,1,1,2-	µg/kg							<6.0 U
Tetrachloroethane,1,1,2,2-	µg/kg							<6.0 U
Tetrachloroethylene	µg/kg							<6.0 U
Tetrachloroethylene (mobile)	µg/kg	<17		<20		<19	<18	
Toluene	µg/kg							<6.0 U
Toluene (mobile)	µg/kg	<15		<18		<18	<16	
Trichloroethane,1,1,1-	µg/kg							<6.0 U
Trichloroethane,1,1,1- (mobile)	µg/kg	<267		<320		<310	<283	
Trichloroethane,1,1,2-	µg/kg							<6.0 U
Trichloroethylene	µg/kg							<6.0 U
Trichloroethylene (mobile)	µg/kg	<26		<31		<30	<27	
Trichloromonofluoromethane	µg/kg							<6.0 U
Trichloropropane,1,2,3-	µg/kg							<6.0 U
Vinyl Acetate	µg/kg							<6.0 U J
Vinyl Chloride	µg/kg							<12 U
Xylene,o- (mobile)	µg/kg	<22		<26		<25	<23	
Xylenes (Total)	µg/kg							<6.0 U
Xylenes,m- & p- (mobile)	µg/kg	<11		<14		<13	<12	

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 51 of 55

	Location ID	NK-SB-303						
	Sample ID	1634086						
	Sample Date	05/22/1997						
	Sample Time	11:55						
	Sample Depth	8' - 10'						
	Laboratory	LEA						
	Lab. Number	25-0637-041						
Constituent	Units							
Date Metals Analyzed	-							
Date Organics Analyzed	-	05/23/1997						
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg							
Barium	mg/kg							
Cadmium	mg/kg							
Chromium	mg/kg							
Lead	mg/kg							
Mercury	mg/kg							
Nickel	mg/kg							
Selenium	mg/kg							
Silver	mg/kg							
Zinc	mg/kg							
Dibromo-3-chloropropane, 1,2-	µg/kg							
Total Petroleum Hydrocarbons	mg/kg							
Acenaphthene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzidine	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Bis(2-chloroethoxy)methane	µg/kg							
Bis(2-chloroethyl) Ether	µg/kg							
Bis(2-ethylhexyl)phthalate	µg/kg							
Bromophenyl Phenyl Ether, 4-	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 52 of 55

	Location ID	NK-SB-303						
	Sample ID	1634086						
	Sample Date	05/22/1997						
	Sample Time	11:55						
	Sample Depth	8' - 10'						
	Laboratory	LEA						
	Lab. Number	25-0637-041						
Constituent	Units							
Butyl Benzyl Phthalate	µg/kg							
Chloronaphthalene, 2-	µg/kg							
Chlorophenol, 2-	µg/kg							
Chlorophenyl Phenyl Ether, 4-	µg/kg							
Chrysene	µg/kg							
Di-n-butyl Phthalate	µg/kg							
Di-n-octyl Phthalate	µg/kg							
Dibenzo[a,h]anthracene	µg/kg							
Dichloro-2-butylene, 1,4-trans-	µg/kg							
Dichlorobenzidine, 3,3'-	µg/kg							
Dichlorophenol, 2,4-	µg/kg							
Diethyl Phthalate	µg/kg							
Dimethyl Phthalate	µg/kg							
Dimethylphenol, 2,4-	µg/kg							
Dinitro-o-cresol, 4,6-	µg/kg							
Dinitrophenol, 2,4-	µg/kg							
Dinitrotoluene, 2,4-	µg/kg							
Dinitrotoluene, 2,6-	µg/kg							
Diphenylhydrazine, 1,2-	µg/kg							
Fluoranthene	µg/kg							
Fluorene	µg/kg							
Hexachlorobenzene	µg/kg							
Hexachlorobutadiene	µg/kg							
Hexachlorocyclopentadiene	µg/kg							
Hexachloroethane	µg/kg							
Indeno(1,2,3-cd)pyrene	µg/kg							
Isophorone	µg/kg							
N-nitroso-n-propylamine	µg/kg							

Notes: 1. Printed on 04/20/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 53 of 55

	Location ID	NK-SB-303					
	Sample ID	1634086					
	Sample Date	05/22/1997					
	Sample Time	11:55					
	Sample Depth	8' - 10'					
	Laboratory	LEA					
	Lab. Number	25-0637-041					
Constituent	Units						
N-nitrosodimethylamine	µg/kg						
N-nitrosodiphenylamine	µg/kg						
Naphthalene	µg/kg						
Nitrobenzene	µg/kg						
Nitrophenol,2-	µg/kg						
Nitrophenol,4-	µg/kg						
Pentachlorophenol	µg/kg						
Phenanthrene	µg/kg						
Phenol	µg/kg						
Propane),2,2'-oxybis(2-chloro-	µg/kg						
Pyrene	µg/kg						
Trichlorobenzene,1,2,4-	µg/kg						
Trichlorophenol,2,4,6-	µg/kg						
Acetone	µg/kg						
Acrolein	µg/kg						
Acrylonitrile	µg/kg						
Allyl Chloride	µg/kg						
Benzene	µg/kg						
Benzene (mobile)	µg/kg	<13					
Bromobenzene	µg/kg						
Bromoform	µg/kg						
Carbon Disulfide	µg/kg						
Carbon Tetrachloride	µg/kg						
Chlorobenzene	µg/kg						
Chlorodibromomethane	µg/kg						
Chloroethane	µg/kg						
Chloroethyl Vinyl Ether,2-	µg/kg						
Chloroform	µg/kg						

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 54 of 55

	Location ID	NK-SB-303					
	Sample ID	1634086					
	Sample Date	05/22/1997					
	Sample Time	11:55					
	Sample Depth	8' - 10'					
	Laboratory	I.E.A.					
	Lab. Number	25-0637-041					
Constituent	Units						
Chloroprene, beta-	µg/kg						
Chlorotoluene, o-	µg/kg						
Chlorotoluene, p-	µg/kg						
Dibromomethane	µg/kg						
Dichlorobenzene, 1,2-	µg/kg						
Dichlorobenzene, 1,3-	µg/kg						
Dichlorobenzene, 1,4-	µg/kg						
Dichlorobromomethane	µg/kg						
Dichlorodifluoromethane	µg/kg						
Dichloroethane, 1,1-	µg/kg						
Dichloroethane, 1,2-	µg/kg						
Dichloroethylene, 1,1-	µg/kg						
Dichloroethylene, 1,2-cis-	µg/kg						
Dichloroethylene, 1,2-trans-	µg/kg						
Dichloropropane, 1,2-	µg/kg						
Dichloropropylene, 1,3-	µg/kg						
Dichloropropylene, 1,3-cis-	µg/kg						
Dichloropropylene, 1,3-trans-	µg/kg						
Ethyl Methacrylate	µg/kg						
Ethylbenzene	µg/kg						
Ethylbenzene (mobile)	µg/kg	<19					
Ethylene Dibromide	µg/kg						
Hexanone, 2-	µg/kg						
Iodomethane	µg/kg						
Methacrylonitrile	µg/kg						
Methyl Bromide	µg/kg						
Methyl Chloride	µg/kg						
Methyl Ethyl Ketone	µg/kg						

Notes: 1. Printed on 04/20/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 55 of 55

	Location ID	NK-SB-303						
	Sample ID	1634086						
	Sample Date	05/22/1997						
	Sample Time	11:55						
	Sample Depth	8' - 10'						
	Laboratory	LEA						
	Lab. Number	25-0637-041						
Constituent	Units							
Methyl Methacrylate	µg/kg							
Methyl-2-pentanone, 4-	µg/kg							
Methyl-tert-butyl Ether	µg/kg							
Methylene Chloride	µg/kg							
Propionitrile	µg/kg							
Styrene	µg/kg							
Tetrachloroethane, 1,1,1,2-	µg/kg							
Tetrachloroethane, 1,1,2,2-	µg/kg							
Tetrachloroethylene	µg/kg							
Tetrachloroethylene (mobile)	µg/kg	<20						
Toluene	µg/kg							
Toluene (mobile)	µg/kg	<19						
Trichloroethane, 1,1,1,-	µg/kg							
Trichloroethane, 1,1,1,- (mobile)	µg/kg	<325						
Trichloroethane, 1,1,2,-	µg/kg							
Trichloroethylene	µg/kg							
Trichloroethylene (mobile)	µg/kg	<32						
Trichloromonofluoromethane	µg/kg							
Trichloropropane, 1,2,3,-	µg/kg							
Vinyl Acetate	µg/kg							
Vinyl Chloride	µg/kg							
Xylene,o- (mobile)	µg/kg	<27						
Xylenes (Total)	µg/kg							
Xylenes,m- & p- (mobile)	µg/kg	<14						

Notes: 1. Printed on 04/20/98

**LEA**

**Table 4**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 1 of 4

	Location ID	NK-SB-256	NK-SB-257	NK-SB-258	NK-SB-259		
	Sample ID	1027121	1027122	1027123	1027124		
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997		
	Sample Time	11:05	13:25	14:10	15:20		
	Sample Depth	6' - 7'	5' - 6'	4' - 7'	5' - 6'		
	Laboratory	AEL	AEL	AEL	AEL		
	Lab. Number	AEL97002622	AEL97002623	AEL97002624	AEL97002625		
Constituent	Units						
Date Organics Analyzed	-	03/05/1997	03/17/1997	03/17/1997	03/17/1997		
Date Semi-volatile Organics Analyzed	-	03/30/1997	03/30/1997	03/30/1997	03/30/1997		
Total Petroleum Hydrocarbons	mg/L	<0.5	<0.5	<0.5	<0.5		
Acenaphthene	µg/L	<10	<10	<10	<10		
Acenaphthylene	µg/L	<1.6 MDL	<1.6 MDL	<1.6 MDL	<1.6 MDL		
Anthracene	µg/L	<10	<10	<10	<10		
Benzidine	µg/L	<10	<10	<10	<10		
Benzo[a]anthracene	µg/L	<0.82 MDL	<0.82 MDL	<0.82 MDL	<0.82 MDL		
Benzo[a]pyrene	µg/L	<0.37 MDL	<0.37 MDL	<0.37 MDL	<0.37 MDL		
Benzo[b]fluoranthene	µg/L	<0.51 MDL	<0.51 MDL	<0.51 MDL	<0.51 MDL		
Benzo[ghi]perylene	µg/L	<10	<10	<10	<10		
Benzo[k]fluoranthene	µg/L	<0.60 MDL	<0.60 MDL	<0.60 MDL	<0.60 MDL		
Bis(2-chloroethoxy)methane	µg/L	<10	<10	<10	<10		
Bis(2-chloroethyl) Ether	µg/L	<10	<10	<10	<10		
Bis(2-ethylhexyl)phthalate	µg/L	<1.3 MDL	<1.3 MDL	<1.3 MDL	<1.3 MDL		
Bromophenyl Phenyl Ether, 4-	µg/L	<10	<10	<10	<10		
Butyl Benzyl Phthalate	µg/L	<10	<10	<10	<10		
Chloronaphthalene, 2-	µg/L	<10	<10	<10	<10		
Chlorophenol, 2-	µg/L	<10	<10	<10	<10 UJ4		
Chlorophenyl Phenyl Ether, 4-	µg/L	<10	<10	<10	<10		
Chrysene	µg/L	<10	<10	<10	<10		
Di-n-butyl Phthalate	µg/L	<10	<10	<10	<10		
Di-n-octyl Phthalate	µg/L	<10	<10	<10	<10		
Dibenzo[a,h]anthracene	µg/L	<10	<10	<10	<10		
Dichlorobenzidine, 3,3'-	µg/L	<10	<10	<10	<10		
Dichlorophenol, 2,4-	µg/L	<10	<10	<10	<10 UJ4		
Diethyl Phthalate	µg/L	<10	<10	<10	<10		
Dimethyl Phthalate	µg/L	<10	<10	<10	<10		

Notes: 1. Printed on 04/20/98

**LEA**

**Table 4**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 2 of 4

	Location ID	NK-SB-256	NK-SB-257	NK-SB-258	NK-SB-259			
	Sample ID	1027121	1027122	1027123	1027124			
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997			
	Sample Time	11:05	13:25	14:10	15:20			
	Sample Depth	6' - 7'	5' - 6'	4' - 7'	5' - 6'			
	Laboratory	AEL	AEL	AEL	AEL			
	Lab. Number	AEL97002622	AEL97002623	AEL97002624	AEL97002625			
Constituent	Units							
Dimethylphenol,2,4-	µg/L	<10	<10	<10	<10 UJ4			
Dinitro-o-cresol,4,6-	µg/L	<10	<10	<10	<10 UJ4			
Dinitrophenol,2,4-	µg/L	<10	<10	<10	<10 UJ4			
Dinitrotoluene,2,4-	µg/L	<10	<10	<10	<10			
Dinitrotoluene,2,6-	µg/L	<10	<10	<10	<10			
Diphenylhydrazine,1,2-	µg/L	<10	<10	<10	<10			
Fluoranthene	µg/L	<10	<10	<10	<10			
Fluorene	µg/L	<10	<10	<10	<10			
Hexachlorobenzene	µg/L	<1.2 MDL	<1.2 MDL	<1.2 MDL	<1.2 MDL			
Hexachlorobutadiene	µg/L	<10	<10	<10	<10			
Hexachlorocyclopentadiene	µg/L	<10	<10	<10	<10			
Hexachloroethane	µg/L	<1.2 MDL	<1.2 MDL	<1.2 MDL	<1.2 MDL			
Indeno(1,2,3-cd)pyrene	µg/L	<10	<10	<10	<10			
Isophorone	µg/L	<10	<10	<10	<10			
N-nitroso-n-propylamine	µg/L	<10	<10	<10	<10			
N-nitrosodimethylamine	µg/L	<10	<10	<10	<10			
N-nitrosodiphenylamine	µg/L	<10	<10	<10	<10			
Naphthalene	µg/L	<10	<10	<10	<10			
Nitrobenzene	µg/L	<10	<10	<10	<10			
Nitrophenol,2-	µg/L	<10	<10	<10	<10 UJ4			
Nitrophenol,4-	µg/L	<10	<10	<10	<10 UJ4			
Pentachlorophenol	µg/L	<0.63 MDL	<0.63 MDL	<0.63 MDL	<0.63 UJ4MDL			
Phenanthrene	µg/L	<1.1 MDL	<1.1 MDL	<1.1 MDL	<1.1 MDL			
Phenol	µg/L	<10	<10	<10	<10 UJ4			
Propane,2,2'-oxybis(2-chloro-	µg/L	<10	<10	<10	<10			
Pyrene	µg/L	<10	<10	<10	<10			
Trichlorobenzene,1,2,4-	µg/L	<10	<10	<10	<10			
Trichlorophenol,2,4,6-	µg/L	<10	<10	<10	<10 UJ4			

Notes: 1. Printed on 04/20/98

**LEA**

**Table 4**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**P&W East Hartford: X-410 Former Oil Storage Rack**

Page 3 of 4

	Location ID	NK-SB-256	NK-SB-257	NK-SB-258	NK-SB-259			
	Sample ID	1027121	1027122	1027123	1027124			
	Sample Date	03/04/1997	03/04/1997	03/04/1997	03/04/1997			
	Sample Time	11:05	13:25	14:10	15:20			
	Sample Depth	6' - 7'	5' - 6'	4' - 7'	5' - 6'			
	Laboratory	AEL	AEL	AEL	AEL			
	Lab. Number	AEL97002622	AEL97002623	AEL97002624	AEL97002625			
Constituent	Units							
Acetone	µg/L	<4.0	<4.0	<4.0	<4.0			
Acrolein	µg/L	<15	<15	<15	<15			
Acrylonitrile	µg/L	<0.65	<0.65	<0.65	<0.65			
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0			
Bromobenzene	µg/L	<1.0	<1.0	<1.0	<1.0			
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0			
Carbon Disulfide	µg/L	<1.0	<1.0	<1.0	<1.0			
Carbon Tetrachloride	µg/L	<1.0	<1.0	<1.0	<1.0			
Chlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0			
Chlorodibromomethane	µg/L	<0.50	<0.50	<0.50	<0.50			
Chloroethane	µg/L	<1.0	<1.0	<1.0	<1.0			
Chloroethyl Vinyl Ether,2-	µg/L	<1.0	<1.0	<1.0	<1.0			
Chloroform	µg/L	<1.0	<1.0	<1.0	<1.0			
Chlorotoluene,o-	µg/L	<1.0	<1.0	<1.0	<1.0			
Chlorotoluene,p-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dibromomethane	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichlorobenzene,1,2-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichlorobenzene,1,3-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichlorobenzene,1,4-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichlorobromomethane	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichlorodifluoromethane	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichloroethane,1,1-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichloroethane,1,2-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichloroethylene,1,1-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichloroethylene,1,2-cis-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichloroethylene,1,2-trans-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichloropropane,1,2-	µg/L	<1.0	<1.0	<1.0	<1.0			
Dichloropropylene,1,3-cis-	µg/L	<0.50	<0.50	<0.50	<0.50			

Notes: 1. Printed on 04/20/98

**LEA**

Page 4 of 4

Notes: 1. Printed on 04/20/98

## **DRAWINGS**



**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**      ☐ **Other (Provide Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 1: SOIL INVESTIGATIONS X-410 OIL RACK  
AREA LOCATION & CONSTITUENTS DETECTED MAP**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

\_\_\_\_\_  
\_\_\_\_\_

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***

# DRAFT

## **UNIT-SPECIFIC TECHNICAL MEMORANDUM: FIRE TRAINING AREA D PRATT & WHITNEY, EAST HARTFORD, CT**

---

**AREA:** North Klondike

**SUB-AREA:** MERL (Materials Experimental Research Laboratory)

**ENVIRONMENTAL UNIT:** Fire Training Area D

**Location:** North Klondike Area; first road south on North Access Road from Perimeter Road; to the north of the Control Room (Drawing 1).

**Description:** Fire Training Area D was an open area that was reportedly used for fire-fighting training exercises for the airport crash response team. An earthen pit was, reportedly, filled with water prior to fire-fighting training exercises. No evidence of the pit was observed in 1996 by Loureiro Engineering Associates, Inc. (LEA) and the exact location is unknown.

**Dates of Operation:** 1960s.

**Processes:** Flammable and combustible materials were poured into the water-filled pit and ignited for fire-fighting training exercises.

**Aerial Photographs:** Large-scale aerial photographs for 1965, 1970, and 1975 were obtained from Keystone Aerial Surveys Inc. Four smaller aerial photos for 1983, 1987, and two unknown dates were also obtained from the Pratt & Whitney (P&W) Photographic Services Department.

All of these photographs, except one, show that the area in question was paved and was mainly used for vehicle parking and/or equipment storage. The large-scale aerial photo from 1965 possibly reveals a small water filled pit in the southwest corner of this paved area, in the reported location of Fire Training Area D. This pit appears to have been paved over sometime between 1965 and 1970.

**Specific Contaminants of Concern:** Flammable and combustible materials including jet fuels, gasoline, and waste oil. In order to be as comprehensive as possible in the investigation that was conducted, the following constituent groups was analyzed for: volatile organic compounds (VOCs) and metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, nickel, and zinc).

**Potential Release Mechanism:** Impacts to soils and groundwater associated with potential spillage of burned or unburned liquids.

### **INVESTIGATION AND REMEDIATION ACTIVITIES:**

Due to the potential for a release associated with this unit, a subsurface investigation to determine the degree and extent of soil contamination was performed in June 1996. Prior to 1996, no subsurface investigation had reportedly been performed.

## June 1996 Investigation (LEA):

**Description:** On June 26, 1996, three soil borings, NK-SB-05 through NK-SB-07, were advanced in the vicinity of the former Fire Training Area D as shown on Drawing 1. Soil samples were collected from each of the borings in continuous 2-foot intervals to fourteen feet, and a 1-foot interval from fourteen to fifteen feet. The depth of the borings was selected to ensure that sufficient data were collected for comparisons against the direct exposure criteria in the Connecticut Remediation Standard Regulation (RSR).

A total of twenty-five soil samples were submitted to the LEA Analytical Laboratory and screened for the presence of target VOCs (benzene (BZ), ethylbenzene (EBZ), tetrachloroethylene (PCE), toluene (TL), 1,1,1-trichloroethane (TCA), trichloroethylene (TCE), and xylenes (XYL)). Based on visual, olfactory, or instrument evidence, and with consideration of the potential release mechanism, two samples from each of the borings and one duplicate were submitted to Averill Environmental Laboratory, Inc. (AEL) and analyzed for the presence of VOCs by EPA Method 8260 and metals by mass analysis methodologies. VOCs were selected as an indicator parameter, consequently semivolatile organic compounds (SVOCs) and total petroleum hydrocarbons (TPH) were not analyzed. A summary of the samples collected and analyses performed is included in Table 1.

**Investigation Results:** Based on the boring logs, groundwater was encountered at approximately 4 feet in all three borings. Varved clay was encountered at approximately 11.5 feet in borings NK-SB-05 and NK-SB-07, but was not encountered in boring NK-SB-06. No visual or olfactory evidence of contamination was noted in the boring logs for these three borings.

Concentrations of constituents detected in soil samples collected for this unit are presented in Table 2. A complete summary of soil analytical results with detection limits is presented in Table 3. Detected concentrations at each sampling location are shown on Drawing 1. No VOCs were detected in the soil samples submitted to the LEA Analytical Laboratory or AEL. One or more of the metals analyzed at AEL were detected in each of the soil samples submitted for analysis. These metals included barium, chromium, and zinc.

**Data Evaluation and Conclusions:** Based on a review of the analytical results, there is no evidence that a release has occurred, and it is believed that the area has been adequately characterized.

The soil boring data were compared against the default numeric criteria included in the RSR and the site-wide background soil concentrations for the North Klondike for various inorganic constituents (Fuss & O'Neill, 1994). For a more detailed discussion of background concentrations of metals in soil refer to *Technical Memorandum 4, Background Soil Data*. Criteria are established in the RSR based on exposure pathways for various environmental media, including soil and groundwater. This evaluation of the soils data is based on a comparison to the residential direct exposure criteria (RDEC), industrial/commercial direct exposure criteria (IDEC), and the GB pollutant mobility criteria (PMC) included in the RSR, as well as the site-wide background soil concentrations.

# DRAFT

The concentrations of the metals detected in these samples are typical of site-wide background concentrations and are not indicative of a release from this unit. For the metals detected in soil, no exceedances of the RDEC or IDEC were noted.

Based on the results of the laboratory analyses of soil samples collected and analyzed, there is no evidence that a release occurred from this unit. As a result, the area has been adequately characterized and no further action is warranted for this unit.

## REFERENCES:

Fuss & O'Neill, Inc, 1994, *Soil Sampling Background Areas – North Klondike*, prepared for Pratt & Whitney.

Keystone Aerial Surveys, Inc. 1965, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Keystone Aerial Surveys, Inc. 1970, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Keystone Aerial Surveys, Inc. 1975, *Aerial Photo of Rentschler Airport and Surrounding Areas*, East Hartford, CT.

Klein, Richard, October 1976, *Test Stand Descriptions for Klondike (Test Area), East Side of Rentschler Airport*, Employee File transcription in undated notes prepared by Westinghouse Environmental for CAS Report.

Loureiro Engineering Associates, August 18, 1995, *Rentschler Airport and Klondike Areas Data Gap Investigation and Work Plan*, Pratt & Whitney, 400 Main Street, East Hartford, CT.

Loureiro Engineering Associates, October 1995, *Rentschler Airport and Klondike Areas Data Gap Investigation and Work Plan*, United Technologies Corporation, Pratt & Whitney, 400 Main Street, East Hartford, CT.

P&W Photographic Services Department, Unknown Date, *Aerial Photograph, Negative Number Z-36268*, Pratt & Whitney, East Hartford, CT.

P&W Photographic Services Department, Unknown Date, *Aerial Photograph, Negative Number CN-50747*, Pratt & Whitney, East Hartford, CT.

P&W Photographic Services Department, 1983, *Aerial Photograph, Negative Number 83C3381-050*, Pratt & Whitney, East Hartford, CT.

P&W Photographic Services Department, 1987, *Aerial Photograph, Negative Number 87C3277-009*, Pratt & Whitney, East Hartford, CT.

Westinghouse Environmental and Geotechnical Services, Inc. November 1990, *Current Assessment Summary Report*, Pratt & Whitney, East Hartford, Connecticut.

## TABLES

***DRAFT***

LEA

[illegible]

*DRAFT*

Page 1 of 2

[illegible]

Notes: 1. Only Detects Shown  
2. Printed on 04/28/98

LEA

*DRAFT*

Page 2 of 2

[illegible]

Notes: 1. Only Detects Shown  
2. Printed on 04/28/98

LEA



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 1 of 15

	Location ID	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05
	Sample ID	1015511	1015512	1015512	1015512	1015513	1015514	1015514
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	10:15	10:20	10:20	10:20	10:40	10:43	10:43
	Sample Depth	0' - 2'	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	6' - 8'
	Laboratory	LEA	AEL	AEL	LEA	LEA	AEL	LEA
	Lab. Number	96-3087-034	AEL96007047	AEL96010871	96-3088-035	96-3089-036	AEL96007051	96-3090-037
Constituent	Units							
Date Metals Analyzed	-		07/02/1996				07/02/1996	
Date Organics Analyzed	-	06/27/1996	07/12/1996		06/27/1996	06/27/1996	07/15/1996	06/27/1996
Date of Metals SPLP Analysis	-			10/04/1996				
Date of Metals SPLP Extraction	-			<				
Date of Other SPLP Analysis	-			10/02/1996				
Extraction Fluid No.	-			1				
Arsenic	mg/kg		<1.07				<1.13	
Arsenic (SPLP)	mg/L			<0.010				
Barium	mg/kg		11				18	
Barium (SPLP)	mg/L			<1.00				
Cadmium	mg/kg		<3.21				<3.39	
Cadmium (SPLP)	mg/L			<0.0010				
Chromium	mg/kg		5.35				6.78	
Chromium (SPLP)	mg/L			<0.050				
Lead	mg/kg		<21.4				<22.6	
Lead (SPLP)	mg/L			<0.0050				
Mercury	mg/kg		<0.214				<0.226	
Mercury (SPLP)	mg/L			<0.0020				
Nickel	mg/kg		<10.7				<11.3	
Nickel (SPLP)	mg/L			<0.10				
Selenium	mg/kg		<1.07				<1.13	
Selenium (SPLP)	mg/L			<0.010				
Silver	mg/kg		<5.35				<5.65	
Silver (SPLP)	mg/L			<0.020				
Zinc	mg/kg		20				19.9	
Zinc (SPLP)	mg/L			0.086				
Acetone	µg/kg		<53				<38	
Acrolein	µg/kg		<26				<19	

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 2 of 15

	Location ID	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05
	Sample ID	1015511	1015512	1015512	1015512	1015513	1015514	1015514
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	10:15	10:20	10:20	10:20	10:40	10:43	10:43
	Sample Depth	0' - 2'	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	6' - 8'
	Laboratory	LEA	AEL	AEL	LEA	LEA	AEL	LEA
	Lab. Number	96-3087-034	AEL96007047	AEL96010871	96-3088-035	96-3089-036	AEL96007051	96-3090-037
Constituent	Units							
Acrylonitrile	µg/kg		<26				<19	
Benzene	µg/kg		<11				<7.7	
Benzene (mobile)	µg/kg	<15			<15	<23		<13
Bromobenzene	µg/kg		<11				<7.7	
Bromoform	µg/kg		<11				<7.7	
Carbon Disulfide	µg/kg		<11				<7.7	
Carbon Tetrachloride	µg/kg		<11				<7.7	
Chlorobenzene	µg/kg		<11				<7.7	
Chlorodibromomethane	µg/kg		<11				<7.7	
Chloroethane	µg/kg		<11				<7.7	
Chloroethyl Vinyl Ether, 2-	µg/kg		<11				<7.7	
Chloroform	µg/kg		<11				<7.7	
Chlorotoluene, o-	µg/kg		<11				<7.7	
Chlorotoluene, p-	µg/kg		<11				<7.7	
Dibromomethane	µg/kg		<11				<7.7	
Dichlorobenzene, 1,2-	µg/kg		<11				<7.7	
Dichlorobenzene, 1,3-	µg/kg		<11				<7.7	
Dichlorobenzene, 1,4-	µg/kg		<11				<7.7	
Dichlorobromomethane	µg/kg		<11				<7.7	
Dichlorodifluoromethane	µg/kg		<11				<7.7	
Dichloroethane, 1,1-	µg/kg		<11				<7.7	
Dichloroethane, 1,2-	µg/kg		<11				<7.7	
Dichloroethylene, 1,1-	µg/kg		<11				<7.7	
Dichloroethylene, 1,2-cis-	µg/kg		<11				<7.7	
Dichloroethylene, 1,2-trans-	µg/kg		<11				<7.7	
Dichloropropane, 1,2-	µg/kg		<11				<7.7	
Dichloropropylene, 1,3-cis-	µg/kg		<11				<7.7	
Dichloropropylene, 1,3-trans-	µg/kg		<11				<7.7	

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 3 of 15

	Location ID	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05
	Sample ID	1015511	1015512	1015512	1015512	1015513	1015514	1015514
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	10:15	10:20	10:20	10:20	10:40	10:43	10:43
	Sample Depth	0' - 2'	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	6' - 8'
	Laboratory	LEA	AEL	AEL	LEA	LEA	AEL	LEA
	Lab. Number	96-3087-034	AEL96007047	AEL96010871	96-3088-035	96-3089-036	AEL96007051	96-3090-037
Constituent	Units							
Ethylbenzene	µg/kg		<11				<7.7	
Hexanone,2-	µg/kg		<26				<19	
Methyl Bromide	µg/kg		<11				<7.7	
Methyl Chloride	µg/kg		<11				<7.7	
Methyl Ethyl Ketone	µg/kg		<26				<19	
Methyl-2-pentanone,4-	µg/kg		<26				<19	
Methyl-tert-butyl Ether	µg/kg		<11				<7.7	
Methylene Chloride	µg/kg		<11				<7.7	
Styrene	µg/kg		<11				<7.7	
Tetrachloroethane,1,1,1,2-	µg/kg		<11				<7.7	
Tetrachloroethane,1,1,2,2-	µg/kg		<11				<7.7	
Tetrachloroethylene	µg/kg		<11				<7.7	
Tetrachloroethylene (mobile)	µg/kg	<23			<23	<36		<20
Toluene	µg/kg		<11				<7.7	
Toluene (mobile)	µg/kg	<22			<21	<33		<19
Trichloroethane,1,1,1,-	µg/kg		<11				<7.7	
Trichloroethane,1,1,1,- (mobile)	µg/kg	<375			<361	<574		<325
Trichloroethane,1,1,2,-	µg/kg		<11				<7.7	
Trichloroethylene	µg/kg		<11				<7.7	
Trichloroethylene (mobile)	µg/kg	<36			<35	<56		<32
Trichloromonofluoromethane	µg/kg		<11				<7.7	
Trichloropropane,1,2,3-	µg/kg		<11				<7.7	
Vinyl Acetate	µg/kg		<11				<7.7	
Vinyl Chloride	µg/kg		<11				<7.7	
Xylenes (Total)	µg/kg		<11				<7.7	

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 4 of 15

	Location ID	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-06	NK-SB-06	NK-SB-06
	Sample ID	1015515	1015516	1015517	1015518	1015527	1015528	1015528
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	10:57	11:00	11:30	11:33	14:52	14:57	14:57
	Sample Depth	8' - 10'	10' - 12'	12' - 14'	14' - 15'	0' - 2'	2' - 4'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	LEA	AEL	LEA
	Lab. Number	96-3091-038	96-3092-039	96-3093-040	96-3094-041	96-3103-050	AEL96007049	96-3105-052
Constituent	Units							
Date Metals Analyzed	-						07/02/1996	
Date Organics Analyzed	-	06/27/1996	06/27/1996	06/27/1996	06/27/1996	06/27/1996	07/12/1996	06/27/1996
Date of Metals SPLP Analysis	-							
Date of Metals SPLP Extraction	-							
Date of Other SPLP Analysis	-							
Extraction Fluid No.	-							
Arsenic	mg/kg						<1.02	
Arsenic (SPLP)	mg/L							
Barium	mg/kg						15.2	
Barium (SPLP)	mg/L							
Cadmium	mg/kg						<3.06	
Cadmium (SPLP)	mg/L							
Chromium	mg/kg						6.01	
Chromium (SPLP)	mg/L							
Lead	mg/kg						20.4	
Lead (SPLP)	mg/L							
Mercury	mg/kg						<0.204	
Mercury (SPLP)	mg/L							
Nickel	mg/kg						<10.2	
Nickel (SPLP)	mg/L							
Selenium	mg/kg						<1.02	
Selenium (SPLP)	mg/L							
Silver	mg/kg						<5.09	
Silver (SPLP)	mg/L							
Zinc	mg/kg						26.5	
Zinc (SPLP)	mg/L							
Acetone	µg/kg						<24	
Acrolein	µg/kg						<12	

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 5 of 15

	Location ID	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-06	NK-SB-06	NK-SB-06
	Sample ID	1015515	1015516	1015517	1015518	1015527	1015528	1015528
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	10:57	11:00	11:30	11:33	14:52	14:57	14:57
	Sample Depth	8' - 10'	10' - 12'	12' - 14'	14' - 15'	0' - 2'	2' - 4'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	LEA	AEL	LEA
	Lab. Number	96-3091-038	96-3092-039	96-3093-040	96-3094-041	96-3103-050	AEL96007049	96-3105-052
Constituent	Units							
Acrylonitrile	µg/kg						<12	
Benzene	µg/kg						<4.9	
Benzene (mobile)	µg/kg	<14	<15	<11	<14	<15		<15
Bromobenzene	µg/kg						<4.9	
Bromoform	µg/kg						<4.9	
Carbon Disulfide	µg/kg						<4.9	
Carbon Tetrachloride	µg/kg						<4.9	
Chlorobenzene	µg/kg						<4.9	
Chlorodibromomethane	µg/kg						<4.9	
Chloroethane	µg/kg						<4.9	
Chloroethyl Vinyl Ether, 2-	µg/kg						<4.9	
Chloroform	µg/kg						<4.9	
Chlorotoluene, o-	µg/kg						<4.9	
Chlorotoluene, p-	µg/kg						<4.9	
Dibromomethane	µg/kg						<4.9	
Dichlorobenzene, 1,2-	µg/kg						<4.9	
Dichlorobenzene, 1,3-	µg/kg						<4.9	
Dichlorobenzene, 1,4-	µg/kg						<4.9	
Dichlorobromomethane	µg/kg						<4.9	
Dichlorodifluoromethane	µg/kg						<4.9	
Dichloroethane, 1,1-	µg/kg						<4.9	
Dichloroethane, 1,2-	µg/kg						<4.9	
Dichloroethylene, 1,1-	µg/kg						<4.9	
Dichloroethylene, 1,2-cis-	µg/kg						<4.9	
Dichloroethylene, 1,2-trans-	µg/kg						<4.9	
Dichloropropane, 1,2-	µg/kg						<4.9	
Dichloropropylene, 1,3-cis-	µg/kg						<4.9	
Dichloropropylene, 1,3-trans-	µg/kg						<4.9	

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 6 of 15

	Location ID	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-05	NK-SB-06	NK-SB-06	NK-SB-06
	Sample ID	1015515	1015516	1015517	1015518	1015527	1015528	1015528
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	10:57	11:00	11:30	11:33	14:52	14:57	14:57
	Sample Depth	8' - 10'	10' - 12'	12' - 14'	14' - 15'	0' - 2'	2' - 4'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	LEA	AEL	LEA
	Lab. Number	96-3091-038	96-3092-039	96-3093-040	96-3094-041	96-3103-050	AEL96007049	96-3105-052
Constituent	Units							
Ethylbenzene	µg/kg						<4.9	
Hexanone,2-	µg/kg						<12	
Methyl Bromide	µg/kg						<4.9	
Methyl Chloride	µg/kg						<4.9	
Methyl Ethyl Ketone	µg/kg						<12	
Methyl-2-pentanone,4-	µg/kg						<12	
Methyl-tert-butyl Ether	µg/kg						<4.9	
Methylene Chloride	µg/kg						<4.9	
Styrene	µg/kg						<4.9	
Tetrachloroethane,1,1,1,2-	µg/kg						<4.9	
Tetrachloroethane,1,1,2,2-	µg/kg						<4.9	
Tetrachloroethylene	µg/kg						<4.9	
Tetrachloroethylene (mobile)	µg/kg	<22	<23	<17	<22	<22		<22
Toluene	µg/kg						<4.9	
Toluene (mobile)	µg/kg	<20	<21	<16	<20	<21		<21
Trichloroethane,1,1,1-	µg/kg						<4.9	
Trichloroethane,1,1,1- (mobile)	µg/kg	<348	<361	<271	<348	<355		<355
Trichloroethane,1,1,2-	µg/kg						<4.9	
Trichloroethylene	µg/kg						<4.9	
Trichloroethylene (mobile)	µg/kg	<34	<35	<26	<34	<34		<34
Trichloromonofluoromethane	µg/kg						<4.9	
Trichloropropane,1,2,3-	µg/kg						<4.9	
Vinyl Acetate	µg/kg						<4.9	
Vinyl Chloride	µg/kg						<4.9	
Xylenes (Total)	µg/kg						<4.9	

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 7 of 15

	Location ID	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06
	Sample ID	1015529	1015529	1015529	1015530	1015531	1015532	1015532
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	15:00	15:00	15:00	15:10	15:22	15:22	15:22
	Sample Depth	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	8' - 10'	8' - 10'
	Laboratory	AEL	AEL	LEA	LEA	LEA	AEL	LEA
	Lab. Number	AEL96007050	AEL96010872	96-3106-053	96-3107-054	96-3108-055	AEL96007053	96-3083-025
Constituent	Units							
Date Metals Analyzed	-	07/02/1996					07/02/1996	
Date Organics Analyzed	-	07/12/1996		06/27/1996	06/27/1996	06/27/1996	07/15/1996	06/27/1996
Date of Metals SPLP Analysis	-		10/04/1996					
Date of Metals SPLP Extraction	-		<					
Date of Other SPLP Analysis	-		10/02/1996					
Extraction Fluid No.	-		1					
Arsenic	mg/kg	<1.1					<1.14	
Arsenic (SPLP)	mg/L		<0.010					
Barium	mg/kg	15.1					25.7	
Barium (SPLP)	mg/L		<1.00					
Cadmium	mg/kg	<3.31					<3.43	
Cadmium (SPLP)	mg/L		<0.0010					
Chromium	mg/kg	5.97					<5.71	
Chromium (SPLP)	mg/L		<0.050					
Lead	mg/kg	<22.1					<22.9	
Lead (SPLP)	mg/L		<0.0050					
Mercury	mg/kg	<0.221					<0.229	
Mercury (SPLP)	mg/L		<0.0020					
Nickel	mg/kg	<11					<11.4	
Nickel (SPLP)	mg/L		<0.10					
Selenium	mg/kg	<1.1					<1.14	
Selenium (SPLP)	mg/L		<0.010					
Silver	mg/kg	<5.31					<5.71	
Silver (SPLP)	mg/L		<0.020					
Zinc	mg/kg	10.7					15	
Zinc (SPLP)	mg/L		0.073					
Acetone	µg/kg	<27					<28	
Acrolein	µg/kg	<13					<14	

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 8 of 15

	Location ID	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06
	Sample ID	1015529	1015529	1015529	1015530	1015531	1015532	1015532
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	15:00	15:00	15:00	15:10	15:22	15:22	15:22
	Sample Depth	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	8' - 10'	8' - 10'
	Laboratory	AEL	AEL	LEA	LEA	LEA	AEL	LEA
	Lab. Number	AEL96007050	AEL96010872	96-3106-053	96-3107-054	96-3108-055	AEL96007053	96-3083-025
Constituent	Units							
Acrylonitrile	µg/kg	<13					<14	
Benzene	µg/kg	<5.4					<5.5	
Benzene (mobile)	µg/kg			<14	<15	<17		<3
Bromobenzene	µg/kg	<5.4					<5.5	
Bromoform	µg/kg	<5.4					<5.5	
Carbon Disulfide	µg/kg	<5.4					<5.5	
Carbon Tetrachloride	µg/kg	<5.4					<5.5	
Chlorobenzene	µg/kg	<5.4					<5.5	
Chlorodibromomethane	µg/kg	<5.4					<5.5	
Chloroethane	µg/kg	<5.4					<5.5	
Chloroethyl Vinyl Ether, 2-	µg/kg	<5.4					<5.5	
Chloroform	µg/kg	<5.4					<5.5	
Chlorotoluene, o-	µg/kg	<5.4					<5.5	
Chlorotoluene, p-	µg/kg	<5.4					<5.5	
Dibromomethane	µg/kg	<5.4					<5.5	
Dichlorobenzene, 1,2-	µg/kg	<5.4					<5.5	
Dichlorobenzene, 1,3-	µg/kg	<5.4					<5.5	
Dichlorobenzene, 1,4-	µg/kg	<5.4					<5.5	
Dichlorobromomethane	µg/kg	<5.4					<5.5	
Dichlorodifluoromethane	µg/kg	<5.4					<5.5	
Dichloroethane, 1,1-	µg/kg	<5.4					<5.5	
Dichloroethane, 1,2-	µg/kg	<5.4					<5.5	
Dichloroethylene, 1,1-	µg/kg	<5.4					<5.5	
Dichloroethylene, 1,2-cis-	µg/kg	<5.4					<5.5	
Dichloroethylene, 1,2-trans-	µg/kg	<5.4					<5.5	
Dichloropropane, 1,2-	µg/kg	<5.4					<5.5	
Dichloropropylene, 1,3-cis-	µg/kg	<5.4					<5.5	
Dichloropropylene, 1,3-trans-	µg/kg	<5.4					<5.5	

Notes: 1. Printed on 04/28/98

**LEA**



**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 9 of 15

	Location ID	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-06
	Sample ID	1015529	1015529	1015529	1015530	1015531	1015532	1015532
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	15:00	15:00	15:00	15:10	15:22	15:22	15:22
	Sample Depth	2' - 4'	2' - 4'	2' - 4'	4' - 6'	6' - 8'	8' - 10'	8' - 10'
	Laboratory	AEL	AEL	LEA	LEA	LEA	AEL	LEA
	Lab. Number	AEL96007050	AEL96010872	96-3106-053	96-3107-054	96-3108-055	AEL96007053	96-3083-025
Constituent	Units							
Ethylbenzene	µg/kg	<5.4					<5.5	
Hexanone,2-	µg/kg	<13					<14	
Methyl Bromide	µg/kg	<5.4					<5.5	
Methyl Chloride	µg/kg	<5.4					<5.5	
Methyl Ethyl Ketone	µg/kg	<13					<14	
Methyl-2-pentanone,4-	µg/kg	<13					<14	
Methyl-tert-butyl Ether	µg/kg	<5.4					<5.5	
Methylene Chloride	µg/kg	<5.4					<8.3	
Styrene	µg/kg	<5.4					<5.5	
Tetrachloroethane,1,1,1,2-	µg/kg	<5.4					<5.5	
Tetrachloroethane,1,1,2,2-	µg/kg	<5.4					<5.5	
Tetrachloroethylene	µg/kg	<5.4					<5.5	
Tetrachloroethylene (mobile)	µg/kg			<22	<23	<25		<4
Toluene	µg/kg	<5.4					<5.5	
Toluene (mobile)	µg/kg			<20	<21	<23		<4
Trichloroethane,1,1,1-	µg/kg	<5.4					<5.5	
Trichloroethane,1,1,1- (mobile)	µg/kg			<348	<368	<406		<65
Trichloroethane,1,1,2-	µg/kg	<5.4					<5.5	
Trichloroethylene	µg/kg	<5.4					<5.5	
Trichloroethylene (mobile)	µg/kg			<34	<36	<39		<6
Trichloromonofluoromethane	µg/kg	<5.4					<5.5	
Trichloropropane,1,2,3-	µg/kg	<5.4					<5.5	
Vinyl Acetate	µg/kg	<5.4					<5.5	
Vinyl Chloride	µg/kg	<5.4					<5.5	
Xylenes (Total)	µg/kg	<5.4					<5.5	

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 10 of 15

	Location ID	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07
	Sample ID	1015533	1015534	1015535	1015519	1015520	1015520	1015520
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	15:24	15:45	15:50	13:30	13:33	13:33	13:33
	Sample Depth	10' - 12'	12' - 14'	14' - 15'	0' - 2'	2' - 4'	2' - 4'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	AEL	AEL	LEA
	Lab. Number	96-3109-056	96-3110-057	96-3111-058	96-3095-042	AEL96007048	AEL96010873	96-3096-043
Constituent	Units							
Date Metals Analyzed	-					07/02/1996		
Date Organics Analyzed	-	06/27/1996	06/27/1996	06/27/1996	06/27/1996	07/12/1996		06/27/1996
Date of Metals SPLP Analysis	-						10/04/1996	
Date of Metals SPLP Extraction	-						<	
Date of Other SPLP Analysis	-						10/02/1996	
Extraction Fluid No.	-						1	
Arsenic	mg/kg					<1.02		
Arsenic (SPLP)	mg/L						<0.010	
Barium	mg/kg					12.6		
Barium (SPLP)	mg/L						<1.00	
Cadmium	mg/kg					<3.06		
Cadmium (SPLP)	mg/L						<0.0010	
Chromium	mg/kg					<5.1		
Chromium (SPLP)	mg/L						<0.050	
Lead	mg/kg					<20.4		
Lead (SPLP)	mg/L						<0.0050	
Mercury	mg/kg					<0.204		
Mercury (SPLP)	mg/L						<0.0020	
Nickel	mg/kg					<10.2		
Nickel (SPLP)	mg/L						<0.10	
Selenium	mg/kg					<1.02		
Selenium (SPLP)	mg/L						<0.010	
Silver	mg/kg					<5.1		
Silver (SPLP)	mg/L						<0.020	
Zinc	mg/kg					15.7		
Zinc (SPLP)	mg/L						0.186	
Acetone	µg/kg					<27		
Acrolein	µg/kg					<13		

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 11 of 15

	Location ID	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07
	Sample ID	1015533	1015534	1015535	1015519	1015520	1015520	1015520
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	15:24	15:45	15:50	13:30	13:33	13:33	13:33
	Sample Depth	10' - 12'	12' - 14'	14' - 15'	0' - 2'	2' - 4'	2' - 4'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	AEL	AEL	LEA
	Lab. Number	96-3109-056	96-3110-057	96-3111-058	96-3095-042	AEL96007048	AEL96010873	96-3096-043
Constituent	Units							
Acrylonitrile	µg/kg					<13		
Benzene	µg/kg					<5.4		
Benzene (mobile)	µg/kg	<14	<16	<16	<15			<15
Bromobenzene	µg/kg					<5.4		
Bromoform	µg/kg					<5.4		
Carbon Disulfide	µg/kg					<5.4		
Carbon Tetrachloride	µg/kg					<5.4		
Chlorobenzene	µg/kg					<5.4		
Chlorodibromomethane	µg/kg					<5.4		
Chloroethane	µg/kg					<5.4		
Chloroethyl Vinyl Ether, 2-	µg/kg					<5.4		
Chloroform	µg/kg					<5.4		
Chlorotoluene, o-	µg/kg					<5.4		
Chlorotoluene, p-	µg/kg					<5.4		
Dibromomethane	µg/kg					<5.4		
Dichlorobenzene, 1,2-	µg/kg					<5.4		
Dichlorobenzene, 1,3-	µg/kg					<5.4		
Dichlorobenzene, 1,4-	µg/kg					<5.4		
Dichlorobromomethane	µg/kg					<5.4		
Dichlorodifluoromethane	µg/kg					<5.4		
Dichloroethane, 1,1-	µg/kg					<5.4		
Dichloroethane, 1,2-	µg/kg					<5.4		
Dichloroethylene, 1,1-	µg/kg					<5.4		
Dichloroethylene, 1,2-cis-	µg/kg					<5.4		
Dichloroethylene, 1,2-trans-	µg/kg					<5.4		
Dichloropropane, 1,2-	µg/kg					<5.4		
Dichloropropylene, 1,3-cis-	µg/kg					<5.4		
Dichloropropylene, 1,3-trans-	µg/kg					<5.4		

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 12 of 15

	Location ID	NK-SB-06	NK-SB-06	NK-SB-06	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07
	Sample ID	1015533	1015534	1015535	1015519	1015520	1015520	1015520
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	15:24	15:45	15:50	13:30	13:33	13:33	13:33
	Sample Depth	10' - 12'	12' - 14'	14' - 15'	0' - 2'	2' - 4'	2' - 4'	2' - 4'
	Laboratory	LEA	LEA	LEA	LEA	AEL	AEL	LEA
	Lab. Number	96-3109-056	96-3110-057	96-3111-058	96-3095-042	AEL96007048	AEL96010873	96-3096-043
Constituent	Units							
Ethylbenzene	µg/kg					<5.4		
Hexanone,2-	µg/kg					<13		
Methyl Bromide	µg/kg					<5.4		
Methyl Chloride	µg/kg					<5.4		
Methyl Ethyl Ketone	µg/kg					<13		
Methyl-2-pentanone,4-	µg/kg					<13		
Methyl-tert-butyl Ether	µg/kg					<5.4		
Methylene Chloride	µg/kg					<5.4		
Styrene	µg/kg					<5.4		
Tetrachloroethane,1,1,1,2-	µg/kg					<5.4		
Tetrachloroethane,1,1,2,2-	µg/kg					<5.4		
Tetrachloroethylene	µg/kg					<5.4		
Tetrachloroethylene (mobile)	µg/kg	<21	<25	<24	<23			<23
Toluene	µg/kg					<5.4		
Toluene (mobile)	µg/kg	<20	<23	<23	<22			<21
Trichloroethane,1,1,1,-	µg/kg					<5.4		
Trichloroethane,1,1,1,- (mobile)	µg/kg	<342	<398	<390	<375			<361
Trichloroethane,1,1,2-	µg/kg					<5.4		
Trichloroethylene	µg/kg					<5.4		
Trichloroethylene (mobile)	µg/kg	<33	<39	<38	<36			<35
Trichloromonofluoromethane	µg/kg					<5.4		
Trichloropropane,1,2,3-	µg/kg					<5.4		
Vinyl Acetate	µg/kg					<5.4		
Vinyl Chloride	µg/kg					<5.4		
Xylenes (Total)	µg/kg					<5.4		

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 13 of 15

	Location ID	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07
	Sample ID	1015521	1015522	1015522	1015523	1015524	1015525	1015526
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	13:35	13:41	13:41	14:00	14:05	14:15	14:20
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 15'
	Laboratory	LEA	AEL	LEA	LEA	LEA	LEA	LEA
	Lab. Number	96-3097-044	AEL96007052	96-3098-045	96-3099-046	96-3100-047	96-3101-048	96-3102-049
Constituent	Units							
Date Metals Analyzed	-		07/02/1996					
Date Organics Analyzed	-	06/27/1996	07/15/1996	06/27/1996	06/27/1996	06/27/1996	06/27/1996	06/27/1996
Date of Metals SPLP Analysis	-							
Date of Metals SPLP Extraction	-							
Date of Other SPLP Analysis	-							
Extraction Fluid No.	-							
Arsenic	mg/kg		<1.17					
Arsenic (SPLP)	mg/L							
Barium	mg/kg		15.8					
Barium (SPLP)	mg/L							
Cadmium	mg/kg		<3.52					
Cadmium (SPLP)	mg/L							
Chromium	mg/kg		<5.86					
Chromium (SPLP)	mg/L							
Lead	mg/kg		<23.4					
Lead (SPLP)	mg/L							
Mercury	mg/kg		<0.234					
Mercury (SPLP)	mg/L							
Nickel	mg/kg		<11.7					
Nickel (SPLP)	mg/L							
Selenium	mg/kg		<1.17					
Selenium (SPLP)	mg/L							
Silver	mg/kg		<5.86					
Silver (SPLP)	mg/L							
Zinc	mg/kg		14.2					
Zinc (SPLP)	mg/L							
Acetone	µg/kg		<35					
Acrolein	µg/kg		<17					

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 14 of 15

	Location ID	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07
	Sample ID	1015521	1015522	1015522	1015523	1015524	1015525	1015526
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	13:35	13:41	13:41	14:00	14:05	14:15	14:20
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 15'
	Laboratory	LEA	AEL	LEA	LEA	LEA	LEA	LEA
	Lab. Number	96-3097-044	AEL96007052	96-3098-045	96-3099-046	96-3100-047	96-3101-048	96-3102-049
Constituent	Units							
Acrylonitrile	µg/kg		<17					
Benzene	µg/kg		<7.0					
Benzene (mobile)	µg/kg	<18		<12	<17	<17	<17	<11
Bromobenzene	µg/kg		<7.0					
Bromoform	µg/kg		<7.0					
Carbon Disulfide	µg/kg		<7.0					
Carbon Tetrachloride	µg/kg		<7.0					
Chlorobenzene	µg/kg		<7.0					
Chlorodibromomethane	µg/kg		<7.0					
Chloroethane	µg/kg		<7.0					
Chloroethyl Vinyl Ether, 2-	µg/kg		<7.0					
Chloroform	µg/kg		<7.0					
Chlorotoluene, o-	µg/kg		<7.0					
Chlorotoluene, p-	µg/kg		<7.0					
Dibromomethane	µg/kg		<7.0					
Dichlorobenzene, 1,2-	µg/kg		<7.0					
Dichlorobenzene, 1,3-	µg/kg		<7.0					
Dichlorobenzene, 1,4-	µg/kg		<7.0					
Dichlorobromomethane	µg/kg		<7.0					
Dichlorodifluoromethane	µg/kg		<7.0					
Dichloroethane, 1,1-	µg/kg		<7.0					
Dichloroethane, 1,2-	µg/kg		<7.0					
Dichloroethylene, 1,1-	µg/kg		<7.0					
Dichloroethylene, 1,2-cis-	µg/kg		<7.0					
Dichloroethylene, 1,2-trans-	µg/kg		<7.0					
Dichloropropane, 1,2-	µg/kg		<7.0					
Dichloropropylene, 1,3-cis-	µg/kg		<7.0					
Dichloropropylene, 1,3-trans-	µg/kg		<7.0					

Notes: 1. Printed on 04/28/98

**LEA**

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Fire Training Area D**

**DRAFT**

Page 15 of 15

	Location ID	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07	NK-SB-07
	Sample ID	1015521	1015522	1015522	1015523	1015524	1015525	1015526
	Sample Date	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996	06/26/1996
	Sample Time	13:35	13:41	13:41	14:00	14:05	14:15	14:20
	Sample Depth	4' - 6'	6' - 8'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 15'
	Laboratory	LEA	AEL	LEA	LEA	LEA	LEA	LEA
	Lab. Number	96-3097-044	AEL96007052	96-3098-045	96-3099-046	96-3100-047	96-3101-048	96-3102-049
Constituent	Units							
Ethylbenzene	µg/kg		<7.0					
Hexanone,2-	µg/kg		<17					
Methyl Bromide	µg/kg		<7.0					
Methyl Chloride	µg/kg		<7.0					
Methyl Ethyl Ketone	µg/kg		<17					
Methyl-2-pentanone,4-	µg/kg		<17					
Methyl-tert-butyl Ether	µg/kg		<7.0					
Methylene Chloride	µg/kg		<7.0					
Styrene	µg/kg		<7.0					
Tetrachloroethane,1,1,1,2-	µg/kg		<7.0					
Tetrachloroethane,1,1,2,2-	µg/kg		<7.0					
Tetrachloroethylene	µg/kg		<7.0					
Tetrachloroethylene (mobile)	µg/kg	<28		<19	<26	<26	<26	<17
Toluene	µg/kg		<7.0					
Toluene (mobile)	µg/kg	<26		<18	<25	<25	<25	<16
Trichloroethane,1,1,1-	µg/kg		<7.0					
Trichloroethane,1,1,1- (mobile)	µg/kg	<443		<305	<424	<424	<424	<271
Trichloroethane,1,1,2-	µg/kg		<7.0					
Trichloroethylene	µg/kg		<7.0					
Trichloroethylene (mobile)	µg/kg	<43		<30	<41	<41	<41	<26
Trichloromonofluoromethane	µg/kg		<7.0					
Trichloropropane,1,2,3-	µg/kg		<7.0					
Vinyl Acetate	µg/kg		<7.0					
Vinyl Chloride	µg/kg		<7.0					
Xylenes (Total)	µg/kg		<7.0					

Notes: 1. Printed on 04/28/98

**LEA**

## **DRAWINGS**



**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2587

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**      ☐ **Other (Provide Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 1: SOIL INVESTIGATIONS FIRE TRAINING  
AREA D LOCATION & CONSTITUENTS DETECTED MAP**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

\_\_\_\_\_  
\_\_\_\_\_

**\* Please Contact the EPA New England RCRA Records Center to View This Document \***